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by
Victoria Thai
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**The Brodie Oaks Shopping Center and CodeNEXT; Redevelopment that is
Equitable, Economical, and Environmentally sustainable.**

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Report

Presented to the Faculty of the Graduate School of

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Dedication

For Tyler and Sumie.

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I'd like to thank professors Jacob Wegmann and Robert Paterson for all of their help and support throughout this process. While I know both had plenty going on, I thank them for their time and consideration.

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Abstract

The Brodie Oaks Shopping Center and CodeNEXT; Redevelopment that is Equitable, Economical, and Environmentally sustainable.

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The University of Texas at Austin, 2018

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The Brodie Oaks Shopping Center in South Central Austin was once a prime site for both retailers and shoppers. When built in 1982, it reflected the times of Austin; a car dominated, sprawling city with big box successes of Sears, Mervyns, Toys R Us and more. Brodie Oaks stood as a retail landmark to the entire Austin community, with 300,000 square feet of prime commercial space, 80,000 square feet of retail space, natural oak trees, department stores, and a professional plaza. However, with the rapid growth of Austin (both population and businesses) and the shift of preferences away from big box retailers to more intimate and pedestrian friendly communities such as the Domain, the Brodie Oaks Shopping Center has quickly faded away as an area that people wanted to shop at.

With more businesses relocating to Austin, there is an opportunity to bring in new jobs and more residents. In addition, the redevelopment of the South Lamar corridor is rapidly approaching the end of the corridor at the Brodie Oaks Center. With the redevelopment of the corridor and the City's adoption of a new land use development code (CodeNEXT), this presents the perfect opportunity for the Brodie Oaks shopping center to rebrand itself with redevelopment. In this report, I present one possibility for a master plan that reflects the proposed rezoning of CodeNEXT's third draft. My idea behind this site was to keep the three E's of sustainability in mind; Economics, Environment, and Equity.

By following these three values, this new redevelopment could be a space for all Austin residents to enjoy and live in.

When CodeNEXT is adopted and Lionstone Investments is able to purchase the remaining parcel of land owned by Toys R Us, developers of this site could provide some of the housing and affordability still missing in the Central Austin Area.

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Chapter 1: Introduction

In recent years, the United States has begun to see a shift from big box retailers and shopping centers to online shopping. With Amazon dominating the online retail market, big box stores have continued to close up shop, most recently Toys R Us. With poor holiday sales and filing for Chapter 11 bankruptcy, the chain is closing all of its U.S. and Puerto Rico stores (Corkery, 2018). One of the main questions that is left now is what to do with these “abandoned” sites that have closed. The answer to this question has a lot to do with the location of the sites. In cities such as Austin, the rapid population growth will make it easier to find investors and developers for abandoned sites to redevelop and make a profit. For other cities that are either slowing growth or in decline, investors and financing will be harder to come by.

Austin shopping centers followed the same pattern as most cities in the United States, with urban flight unfolding simultaneously with growing post-war consumer spending. A dense downtown with high rise office buildings and a sprawling population gave rise to shopping centers such as the Brodie Oaks Shopping Center that follow these suburban development patterns. During this time period, this model was most practical and profitable (Geiling, 2014). The population of Austin in 1982 was 358,950¹ when Brodie Oaks was opened. In 2016, Austin’s population was 926,426². With the population almost tripling during this time period, the city reached a point where big box retail was becoming

¹ City of Austin’s Population History - Planning Demographics

² Ibid

less popular with residents and less profitable with the rise of land prices and development costs.

There has also been a shift in mentality for residents who have different preferences from the typical suburban lifestyle. Those who prefer to live in the city and avoid the commute to downtown are shifting back towards the city and increasing the demand and prices for housing in Central Austin. Areas such as Hyde Park, the South Lamar Corridor, and East Austin are seeing a rise in housing prices and land values. One example of these types of new communities is Mueller. Once the airport for Austin, Mueller is now a sustainable, transit-oriented community that includes a broad range to shop, dine, jog, bike and play. This shift is not only seen in the Central Austin area. Surrounding suburbs are also searching for more walkable urban areas. The Domain in Northwest Austin is another prime example of a walkable urban community that is the only one of its kind not located in Central Austin.

Based on these patterns of development and migration in more recent years, more pressure is coming into the central city in the forms of infill development. Recent developments such as Lamar Union³ have been appearing along the corridor. Lamar Union is a vertical mixed-use development that was previously a 1960's retail strip center.

³ Lamar Union is a vertical mixed-use development that was previously a 1960's retail strip center. The site is 9 acres and is still occupied by two tenants that also occupied the site before redeveloped; The Alamo Drafthouse and The Highball. Lamar union includes seven new restaurants, 440 apartment units and more than 1,300 structured parking spaces.

CodeNEXT is a part of the city of Austin’s comprehensive plan, *Imagine Austin*. The comprehensive plan gives the city a “vision” of complete communities that will be able to respond more efficiently and correctly to the growth pressures and take advantage of opportunities. To see this vision come to fruition, the land development code needs to be updated. CodeNEXT is an initiative proposed by the city to revise the land development code, this determines how land can be used throughout the city that includes, “what can be built, where is can be built, and how much can (and cannot) be built” (City of Austin, 2018). The process has included residents of Austin, the business community, and civic institutions to come up with the standards and regulations that are most important to the community.

As the South Lamar corridor is redeveloping rapidly, the pressure for the redevelopment of the Brodie Oaks Shopping Center can now be seen as Lionstone Investments has purchased this center in 2016. This sets the stage for my research question. Based on the history, current trends, and in light of CodeNEXT, what are the best redevelopment uses for this shopping center that will not only have a positive impact for both businesses and the public, but also most aligns with CodeNEXT and most advance the goals of the comprehensive plan, *Imagine Austin*, to be a “complete community that respects all Austinites⁴”? What type of developments will follow the three E’s of sustainability, Environment, Economics, and Equity?

⁴ *Imagine Austin Comprehensive Plan*, 2012

To answer this research question, I will first conduct background research on shopping centers; what the origination is and how have they adapted to today's constantly evolving economy. I will then research two centers in Austin, the Hancock Center and Highland Mall and how they have adapted to the market today. I will bring up Imagine Austin and CodeNEXT to explain how the future of redevelopment of shopping centers may be affected. After this I will introduce the site including, history, context and current conditions.

My methodologies will be to look at three case studies of Low Impact Development and its benefit environmentally and how development can create a positive effect on the site and surrounding environment. For this I will look at Charlotte North Carolina and how the county has created practices that are beneficial to their environment. I will then analyze a residential development in South Lamar, a development focused on creating equity for its residents by offering more affordable units; The Denizen. My last case study will be most similar to the Brodie Oaks Shopping Center redevelopment, a mixed-use redevelopment project in Dallas called Trinity Groves. I will examine the restaurant incubator programs that they have created and how the area has performed economically.

In my next chapter I will analyze the feedback of CodeNEXT it's received from residents, developers and environmentalists by looking at published articles in newspapers and online. The reason for this is to analyze the potential that CodeNEXT will have on not only the site, but also the future for redevelopment and density in Austin and how this could affect surrounding suburbs that commute into the City for work. As the city continues to work on the code, understanding views from developers and residents will give better

understanding of where CodeNEXT stands. I will be able to understand segments missing, how easy or difficult it will to develop more housing units that are affordable or create more density. Finally, a sample masterplan will be proposed that will be a culmination of the history of shopping centers, current site analysis, case studies, feedback on CodeNEXT and CodeNEXT itself.

Chapter 2: The History of Shopping Centers

There are several conversations that contest the origination of shopping centers. Throughout the early 1900's, several types of shopping centers originated in different states. In California in the 1920's, supermarkets would anchor and act as a magnet for a strip of smaller stores. In 1907, a Baltimore neighborhood, a group of stores established off-street parking. In 1922 in Kansas City, a cluster of stores only accessible by car. 1931, the Highland Park Shopping Village in Dallas was the first group of stores that had their own parking lot with stores facing away from the access road (Feinburg, 1991).

The United States at the end of World War II emerged determined to enhance economic recovery brought on from the Great Depression of 1929. While military production would still continue, the key component of lifting the economy would be mass consumption. Anyone from business leaders, unions, government workers all promoted consumption to Americans as a critical responsibility of citizens to "improve the living standards of all Americans, a critical part of a prosperity-producing cycle..." (Cohen, 1996).

The consumer marketplace had been restructured due to the suburbanization of residential life in the postwar era. Suburban home developers did not provide any commercial/retail uses for residents of these areas, instead (as we can see in today's neighborhoods) residents of these suburbs must drive to either the city or market towns⁵.

⁵ A town of moderate size in a rural area, where a regular market is held.

This continued until around the 1950's when a structure came along that fit the new suburbanized, mass-consumption society (Cohen, 1996).

Businesses realized that the postwar suburbanites were now dependent on their motorized vehicles such as cars. Traffic and parking problems discouraged commercial expansion in the central business districts of cities and smaller market towns. By the mid 1950's many commercial developers (and owned department stores) were creating a new type of market place, the regional shopping center. This was designed for fulfilling suburbanites consumption and community needs (Cohen, 1996). These new centers were located near highway intersections or along busier roads and attracted residents who lived within 30 minutes. The idea would be that customers would drive to this commercial retail location, park in any of the hundreds of parking spots available, and then proceed to walk (bus services were provided) into this new style of retail.

This was the “new city” of the postwar era, a new idea of how community spaces should be created when the economy and society are based on mass consumption. These new regional shopping centers would be the center for settlements that grew by adding residential nodes off of major roadways instead of the previous concentric rings from the central business districts/downtown (Cohen, 1996). Malls were the new town square: a place to shop, eat, gather and meander. It was envisioned as a pristine, opposite of the gritty and dangerous urban center (Geiling, 2014). The idea behind this new city was to maintain the idea of creating a publicly centrally located space that combined commercial and civic activity (Cohen, 1996).

At the same time these malls brought the best qualities of urban life to the suburbs while leaving the negative/bad characteristics of the city. A shopping center that was centrally owned and managed, provided a solution to many of the city's problems. With a central administration handling planning and management, a "scientific" method of placement of stores, meeting customers' different needs and maximizing store owners profits were possible (Cohen, 1996). In addition, common complaints of the usual downtown shopping problems were addressed such as providing plenty of parking, assuring safety by hiring security guards, delivery tunnels and loading courts kept truck traffic away from shoppers, shaded walkways and air-conditioning was also provided to make shopping more comfortable all year round, and background music replaced the typical noisy street traffic. Having national chains locate in these shopping centers over local stores (that were required by large investors such as insurance companies) brought consumers the most up to date trends in not only products but also merchandise techniques. What made this new market structure different and appealed to investors was that these spaces encouraged social innovation while creating maximum profit.

The idea of the shopping mall was developed from Victor Gruen, whose architecture firm became one of the top firms in the United States to provide master plans and shopping centers. His first suburban air shopping center in Detroit in 1954 (Byrnes, 2013). Based on the success of this his next complex was an 800,000 square foot shopping mall in Minnesota (Southdale Mall), becoming the first enclosed shopping mall in the country. This indoor shopping mall included fountains, an aviary, and an art installation.

When opened, the mall became one of the most exciting idea in urbanization. Because of the success of this first indoor mall, over 1,200 shopping centers have opened since then.

Garden State Plaza and Bergen Mall

Two centers; Garden State Plaza and Bergen Mall located in Paramus New Jersey, are good models to show how shopping centers became more than just a collection of stores. These malls offered more services and resources than people would use to go downtown for. Not only was clothing sold, but there were also specialty stores all clustered together; furniture, hardware, appliances, groceries, gifts, drugs, toys, bakeries, jewelry, and more. Soon afterwards, the resources grew even larger to include restaurants, a post office, laundromat, cleaners, a movie theater, bowling alley, and ice-skating rink and playground, what Gruen originally intended for. These shopping centers created rooms for community organizations, scheduled cultural and educational activities, held concerts, campaign appearances by electoral candidates, dance classes and more. These were some of the ways that the two malls integrated themselves with the community of Paramus. They also stayed open from 10 am to 9:30 pm up to six nights a week. These new postwar era shopping centers contributed to the creation of a new type of urbanism that fit the rise of automobiles (Cohen, 1996).

While these were the new city of the postwar era, they were not excluded to only suburbans, but to the middle class in general. Stores such as Macy's quoted, "We are a type

of organization that caters primarily to middle-income groups, and our stores reflect this in the merchandise they carry and in their physical surroundings ⁶”.

To understand the success of the shopping centers in attracting customers, surveys were taken of residents who lived within a ten-minute drive of Garden State Plaza and Bergen Mall. Before these two malls were built, seven out of ten families that lived within ten minutes of these two malls would shop in New York City. One year after the opening of the two malls, the number of suburban families that travelled to the city dropped by 50% and to 80% two years after opening. Those who were still shopping in New York were spending less, \$93 to \$68 after the two shopping centers had opened (Pratt and Pratt, 1960)⁷.

While the success of malls was growing, Gruen’s initial idea was mutated into what most people think of what a mall is today, a formulaic collection of fully enclosed space mostly occupied by national retailers and surrounded by parking lots as far as the eye can see. His idea was to create more urban developments and social spaces without the inconvenience of travelling to downtown, but instead this expansive vision was stripped down to what most people think of shopping centers. When given credit as the “father of the shopping mall”, he stated, “I would like to take this opportunity to disclaim paternity once and for all. I refuse to pay alimony to those bastard developments. They destroyed our cities.”

⁶ R.H. Macy & Company, Annual Report (New York, 1955)

⁷ These were 1960’s dollars, when calculating in present day dollars (2018) spending goes from \$782.30 to \$572.01.

Peak and Decline:

The peak of shopping malls and shopping centers occurred in the 1990's (Geiling, 2014). From then on shopping centers have been in decline due to various factors including market adjustments (the American landscape became bloated with malls), the recession, shift to spending online, and more (Geiling, 2014). 2007 was the first year that a retail shopping mall wasn't built since the 1950's (Geiling, 2014). Analysts have predicted that by 2022, 1 out of every 4 malls in the U.S. could close (Sanburn, 2017). By July 2017 5,300 retail stores were already closed throughout the U.S. including Sears, Macy's, JCPenney.

There are several factors that have contributed to the decline of retail. Since 2002, department stores have lost 448,000 jobs (or a 25% decline). Shoppers make 51% of their purchases⁸ (Farber, 2016). However, only 178,000 jobs have been added to the ecommerce sector. Some of these jobs can be found in distribution centers such as an Amazon warehouse. Another reason for the decline is the result of too many malls being constructed in the 80's and 90's. In addition, consumers are spending more on services compared to retail. Americans have been making bigger expenditures on investments such as housing. In addition, an increasing number of people are choosing to spend more on services such as smartphone data plans or streaming entertainment services (Romo, 2018). As a result of the fall of the mall, not only were jobs lost, but social gathering spaces disappeared as well.

⁸ This survey was conducted by comScore and UPS. In the 5th year they polled more than 5,000 consumers who make at least two purchases in a three-month period.

The steps of a declining mall can be identified when an anchor store closes. Once an anchor store closes their doors, finding another business to lease out this space becomes very difficult because of the large space (often the space is at least 100,000 square feet). If the spaces aren't leased, the loss of the anchor can create a snowball effect of less people visiting the mall forcing more stores to close their doors (Peterson, 2017).

There is no doubt that declining malls have negative effects on the surrounding community, but to what degree it varies based on where the mall is located. In areas that rely on sales tax and income tax revenue, these are seeing more monetary impacts. For example, in Ohio, some counties get up to half of their budget from sales tax on top of the states 5.75% rate. As more malls are closing, these sales tax revenues are declining as well, this will eventually result with local governments having to decrease spending projects and cut back on programs that would normally benefit residents of these communities. In addition, more closures of malls lead to less revenue from commercial property taxes. For states that rely on income taxes, retail workers that are unemployed will spend less creating a cycle of lowering revenue (Semuels, 2017).

Chapter 3: History of Shopping Centers in Austin

Austin, Texas currently has a variety of shopping centers listed in Table 1 ⁹:

Type	Concept	Gross Leasable Area (square foot)	Examples in Austin
Super Regional Mall	Similar in concept to regional malls, but offering more variety and assortment	800,000 +	-Barton Creek Square -The Domain -Southpark Meadows
Regional Mall	General merch or fashion-oriented offerings.	400,000-800,000	-Hancock Center
Community Center (Large Neighborhood Center)	General merch or convenience-oriented offerings. Wider range of apparel and other soft goods.	125,000-400,000	-The Arboretum
Neighborhood Center	Convenience oriented	30,000-125,000	-Dobie Mall
Strip/Convenience	Attached row of stores or service outlets managed as a coherent retail entity. Does not have enclosed walkways linking the stores	<30,000	-Convenience stores around Austin such as gas stations

Table 1: Types of Shopping Centers around Austin today.

⁹ Definitions taken from the International Council of Shopping Centers:
https://www.icsc.org/uploads/research/general/US_CENTER_CLASSIFICATION.pdf

Hancock Center

One of the first shopping centers in Austin was the Hancock Center, currently located along 41st Street and Red River. Back in 1946, this land was a part of the 92-acre Austin Country Club. The city paid \$175,000 for the property. Over the next ten years, the area surrounding this tract of land began to see housing development, and commercial growth along the I-35 corridor. In 1959, the city was approached by Sears, Roebuck & Co and their development department. Local residents of the area were surprised when the city rezoned the property for commercial from parkland but didn't disclose that this was requested by Sears. The center was opened in May 1964 with "parklike settings", fountains and background music. The city had never seen anything this large before, at 500,000 square feet, the Hancock Center was one the largest purely private-sector project in Austin at the time (Clark-Madison, 1997).

At opening day in May 1964, the center opened with 34 stores and claimed that, "Hancock Center is a place where convenience makes shopping an unforgettable pleasure in an atmosphere of unsurpassed beauty that is truly out of the ordinary" (Levi-Garza & Pauls, 2011). This center let the world know that Austin was growing as a city, with its first major mall in Austin and first Dillard's in Texas and a Sears that more than doubled the original downtown store. Shoppers came from all over the city to visit this space.

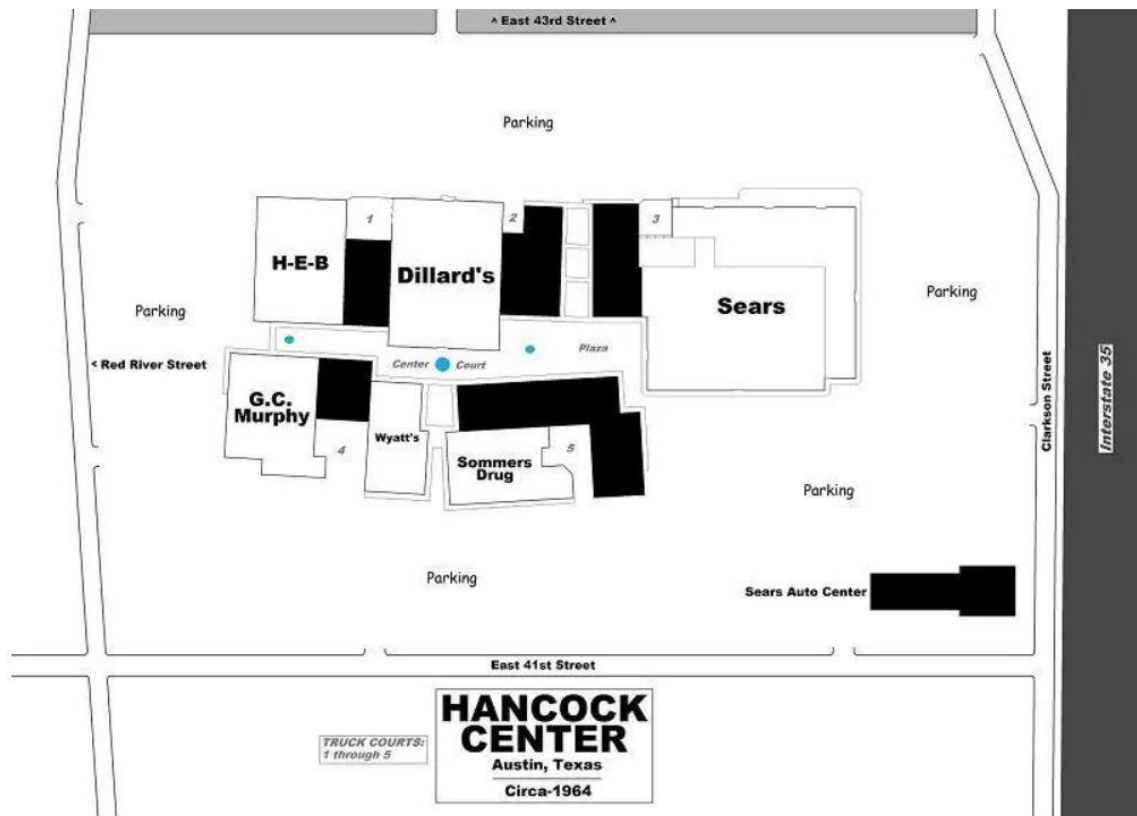


Figure 1: Layout of Hancock Center in 1964.

By the 1980's most of the center was still occupied, and the center still had its anchor department stores. In the 1990's many trends such as mega mall competition and suburban sprawl "killed off" Hancock Center¹⁰.

When walking through Hancock Center today, nearly 53 years after the center opened, the center is mostly dominated by either food retail such as HEB, Petco, Twin Liquors, or services such as T-Mobile or Time Warner Cable. Sears is still occupying a

¹⁰ The original theme and idea of the Hancock Center was "killed off". The park-like settings, famous fountains and background music are no longer seen today and have been replaced with car dominated parking spots and no community space to gather.

larger part of the center, however what once was a two-story dominant department center, has dwindled to a ghost parking lot that occasionally houses the overflow of parking from HEB and only the first floor in operation.



Figure 2: Layout of the Hancock Center in present day. Source: Regency Center

Highland Mall

While the Hancock Center was one of the first outdoor centers in Austin, Highland Mall was the first indoor shopping center. The mall was developed by Maryland's Rouse Company. The structure was built on 81 acres, adjacent to I-35 and 290. This new complex encompassed 749,800 square feet that was leasable. The mall was anchored by a two-level JCPenney that took up 233,600 square feet, 2-level Scarborough's (an Austin department

store) and a 4-level anchor store, Joske's (A San Antonio based department store that was eventually sold to Dillard's). When the mall opened in 1971, occupants ranged from retail to services to food including Luby's Cafeteria and The Gap. On opening day, most of the 5,000 parking spots were filled. At its peak, Highland Mall had 1,100,000 square feet of leasable space (Austin American Statesman, 1971).



Figure 3: Opening day of Highland Mall on August 4th, 1971. From left: Rouse Co. Vice-Chairman Willard Rouse, Margaret Scarbrough Wilson, Texas Gov. Preston Smith and Austin Mayor Roy Butler. Darl Hyatt/American-Statesman



Figure 4: Highland Mall in August, 1991. Tom Lankes/American-Statesman



Figure 5: December 26th, 1990. The Day after Christmas Shopping. Tom Lankes/American-Statesman

From 1971 until the mid-2000's flourished in Austin. The mall drew in crowds of all ages. However, in 2006 a decline in the mall started when JCPenney closed their doors after poor performance. Other stores soon followed such as Dillard's. In 2009, Yahoo! Reported that it was one of "America's Most Endangered Malls." In 2010, Highland filed for bankruptcy. In addition, demographics in the area shifted from suburban middle-class families in 1971 to working class African Americans. This could have been a factor when the mall received negative publicity in 2009 when the mall closed its doors earlier than usually during Texas Relays (a track and field event hosted by The University of Texas at Austin). Closing Highland early drew in controversy. Jeff Gionnette, a spokesman for the mall claimed that there weren't enough security and safety resources to support the mall during this busy time (Dunbar, 2009). Nelson Linder, president of the Austin NAACP accused management to be, "incompetent" and "xenophobic". Nonetheless, Highland mall remained open for another six years until Highland Mall closed for good. In May 2015 the mall closed its doors for good.



Figure 6: Highland Mall on a usually deserted day.



Figure 7: A deserted food court

While the mall is no longer in operation, Austin Community College (ACC) saved Highland in a different way. ACC purchased the mall in 2010 while they were still in operation. Their plan was to redevelop the mall into a new campus that will be more utilized than its counterpart, “once again poised to lead the city into a new era, creating a healthy and economically sustainable community that is perfectly in step with the values of today’s Austin ¹¹.” The new campus gives students and ACC the chance to, “meet the demands of the 21st century marketplace, particularly in health care and IT fields” (Swiatecki, 2014). Phase I was completed in August of 2014, Phase II will be completed in 2019. The development itself is expected to have:

- 3 new parks.
- 1.25 miles of trails.
- 1,200 units of affordable housing.
- 800,000 square feet of office space.
- 200 hotel rooms.
- 150,000 square feet of retail.
- ACC 1,300,000 square feet.

Population projections are:

- 20,000 students.
- 1,800 residents.
- 6,800 employees (ACC and Private).

¹¹ Highland Vision Book, 2018

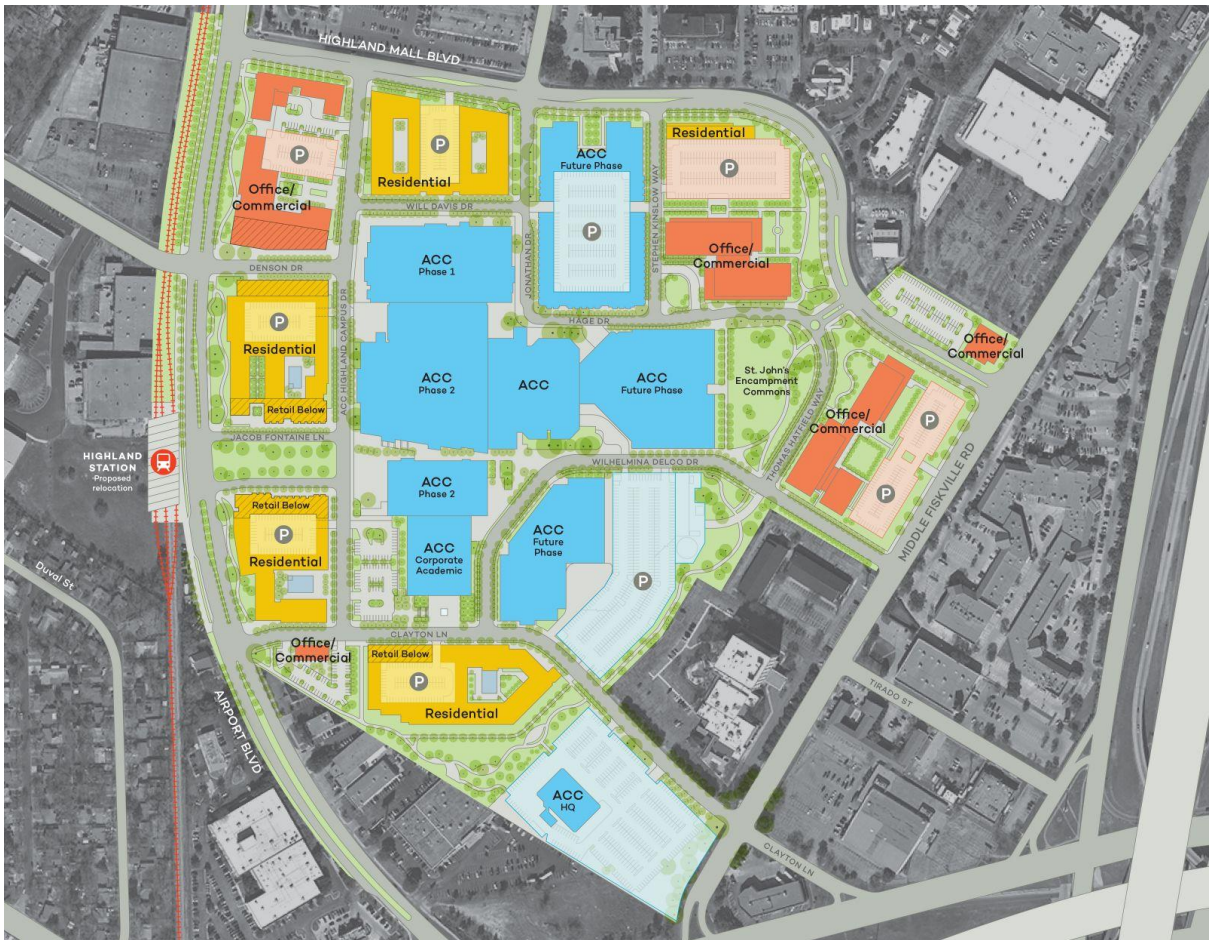


Figure 8: Master plan for ACC Highland

Chapter 4: Analysis

Brodie Oaks Shopping Center:

The site that I will be focusing on and proposing redevelopment uses for is the Brodie Oaks Shopping Center. Brodie Oaks is a 322,690 square foot/28-acre center that is a community retail space, but also contains office space. The site is located at the northeast corner of the Capital of Texas Highway (Loop 360) and South Lamar in South Central Austin. The shopping center is also located at the end of one of the busiest corridors in Austin, South Lamar. Current tenants include Last Call by Neiman Marcus, Sprouts Farmer's Market, Hobby Lobby and restaurants such as Olive Garden, Pei Wei Asian Diner, Starbucks and more (Figures were taken on 1/13/2018 at 10:30 am)



Figure 9: Toys R Us parking lot, taken on 1/13/2018 at 10:30am



Figure 10: Vegetation in the parking lot, taken on 1/13/2013 at 10:30am

The first phase of the Brodie Oaks Shopping Center opened in early October of 1983. This included the opening of the major anchor store “Toys R Us” which was the first in Austin (Ladendorf, 1982). The other two anchor stores included Mervin’s (a California based department store with an average customer count exceeding 600,000 and with over 100 locations nationwide) and Edison’s (A catalog showroom, the anchor store had 50,000 square feet and was the second largest showroom in Austin). Because of the location of the

site and the environmental sensitive areas, the shopping center cost over \$4 million to develop (1982 dollars)¹². The site was developed by Trammell Crow Company ¹³.

In June 2016, the property was acquired by Lionstone Investments, a real estate investment firm whose goal it is to identify and execute the best investment strategies in real estate. The firm only operates in cities where there is a 3% annual GDP growth ¹⁴. Their approach includes looking at U.S. cities that contain the most competitive industries, ones that, “capture out-sized GDP and heightened productivity in areas where they cluster” (Lionstone Investments, 2018)¹⁵. These cities are deemed “Places for Productive People.” Lionstone then measures and maps these productivity clusters and search for properties that feature the physical characteristics that will attract greatest tenant demand.

As of January 2018, there have not been any plans of redevelopment of the site. In fact, Barshop & Oles, who was managing the property before Lionstone purchased Brodie Oaks will still continue to manage (Willis, 2016). One reason for no plans could be that Lionstone was not purchased the parcel which Toys R Us is on, because this land is owned by Toys R Us themselves under “Giraffe Properties LLC” (Figure 11). The rest of the site is owned by Lionstone under the subsidiary “LCFRE Austin Brodie Oaks LLC”

¹² \$10,320,870.40 when adjusted for inflation, 2018.

¹³ There was little to no information online or at the Austin History Center about the Brodie Oaks Shopping Center.

¹⁴ Paterson, T. (2017). Lionstone Investments. The Real Estate Industry Career Panel discussion, McCombs School of Business. The University of Texas at Austin.

¹⁵ Lionstone Investments via <https://lionstoneinvestments.com/approach/>



Figure 11: Owner of the Parcel that Toys R Us is on is owned by Toys R Us, whereas the rest is owned by Lionstone.

While Toys R Us currently owns the site, in November of 2017 the company filed for bankruptcy. While there were efforts to turn the store around, poor holiday sales created a bleak looking future for the chain store (Sit, 2018). On March 14th, 2018 Toys R Us announced all stores would close in May, including the Brodie Oaks location ¹⁶.

The pressures that the Brodie Oaks Shopping Center face can be related to those of South Lamar. The rapid redevelopment of the 78704-zip code has led this area to being

¹⁶ Toys R Us closing all stores nationwide, including Brodie Oaks location, Community Impact, March 23rd, 2018

one of the hottest in the Austin market. Its median home values were \$469,191 in 2015 and \$539,600 in 2017, an increase of 15% in just two years (Albiges, 2017). These redevelopments are giving South Lamar a face lift, while the Brodie Oaks Shopping Center is quickly becoming an out of date center that does not attract as many customers compared to what was built and how many people could park in the parking lot. The images below show the center as of January 2018:



Figure 12: Parking Lot of the Brodie Oaks Shopping Center on a Saturday morning.



Figure 13: Empty Parking lot in the Shopping Center



Figure 14: Manmade Trail



Figure 15: Entrance of manmade trail



Figure 16: Further into the trail



Figure 17: View of parking lot from trail

The numerous and diverse businesses along the corridor also present a challenge for the Brodie Oaks Shopping Center. Duplicating the same businesses as those leasing space in the new developments along South Lamar will create problems. While the Brodie Oaks Shopping center is mostly comprised of chain stores, those who are local and want to locate in the center may have trouble drawing in customers who may not know that there are local businesses in this center.

A South Lamar Corridor Study was conducted back in 2014 to analyze the safety and mobility concerns. Many of the responses emphasized the importance of an improvement in transit options, bicycle access and mobility and the pedestrian experience. With its prime location at the intersection of South Lamar/Capital of Texas Highway/Ben

White, a large amount of pressure can be seen from here, such as an increase in vehicles on South Lamar, an increase in housing prices and more ¹⁷. Any redevelopment effort will need to consider how busy this intersection is and find solutions that would either decrease or increase VMT/VPD as little as possible.

Edwards Aquifer:

Ecologically, the site sits on the edge of the Barton Creek Greenbelt and on top of the recharge and transition zone of the Edwards Aquifer (TCEQ, 2018). The Barton Creek Greenbelt is a 600 acre preserve with a 7.25-mile trail from Zilker Park to the Lost Creek subdivision ¹⁸. The greenbelt was created to preserve Barton Springs from the threat of commercial and residential development (Austin Parks Foundation, 2018). The Edwards Aquifer is one of the largest artesian aquifers in the world. The aquifer is located along the eastern edge of the Edwards Plateau and is the source of drinking water for two million people. The Edwards Aquifer is a primary water supply for agriculture and industry in the region. The aquifer also feeds into the Comal and San Marcos springs, provides flow for recreational use in several other rivers and is the home to many endangered species. The two main threats to the aquifer are pollution and extraction. Urbanization concentrates

¹⁷ From the property owner's standpoint, this can be seen as a positive and negative. Positive since more active areas will see more investments such as new/redeveloped housing and infrastructure therefore lead to an increase in property value. However, the negative effects of growth and pressure also results in more traffic if public infrastructure is not addressed and an increase in property taxes because of the rise in value.

¹⁸ Austin Parks via <https://www.austinparks.org/parks/barton-creek-greenbelt/>

pollution by collecting pollutants in impervious cover. Rain within the recharge zone that washes these pollutants into the karst features and directly into the aquifer (Mahler, 2004 Mahler, B., 2004, What's in the Water? The History and Future of Barton Springs. UT ESI Outreach Lecture).

Based on these pressures both economically and environmentally, the Brodie Oaks Shopping Center is in a unique position. This area is unique when compared to the other shopping centers in Austin because of its location near two major streets and its adjacency to an environmentally sensitive and protected area. Issues that the Brodie Oaks Shopping Center will have to consider where other centers may not include the federal Endangered Species Act ¹⁹, the Edwards aquifer, the intersection of South Lamar and Capital of Texas Highway and more.

CodeNEXT:

CodeNEXT is a part of the city of Austin's comprehensive plan, *Imagine Austin*. The comprehensive plan gives the city a "vision" of complete communities that will be able to respond more efficiently and correctly to the growth pressures and take advantage of opportunities. To see this vision come to fruition, the land development code needs to be updated. CodeNEXT is an initiative proposed by the city to revise the land development code, this determines how land can be used throughout the city that includes, "what can be

¹⁹ Species that are in the Edwards Aquifer that could trigger issues include; Fountain Darter, Texas Blind Salamander, San Marcos Gambusia, Texas Wild Rice, Comal Springs Riffle Beetle, Comal Springs Dryopid Beetle, and Peck's Cave Amphipod.
<http://www.edwardsaquifer.net/species.html>

built, where is can be built, and how much can (and cannot) be built” (City of Austin, 2018). The process has included residents of Austin, the business community, and civic institutions to come up with the standards and regulations that are most important to the community.

CodeNEXT targets five community priorities to improve the quality of life in Austin (City of Austin, 2018):

- Communities: Vibrant and Prosperous - Austin is home to many vibrant communities that have been developed over several decades and new ones that are constantly appearing. To protect these, the city wants to support existing communities including neighborhoods and businesses, preserve the character of diverse areas, and manage future growth.
- Mobility: Walkable and connected - Currently, it’s difficult for many people to perform daily tasks that include work and recreation if they do not have access to a vehicle. CodeNEXT aims to provide tools to improve connections between neighborhoods and offer more walkable communities.
- Environment: Natural and resilient - The city has to address many environmental issues as a result of growth. Not only preserving open space and natural habitats, but also providing water stewardship and flood mitigation. New regulations developed can help residents of the city be smarter and more resilient as we protect our natural resources.

- **Housing: Inclusive and affordable** - Inclusive and affordable housing is a challenge for every city. Revisions to the code offer more diverse housing choices and building types. It also includes a citywide framework for affordable housing.
- **Permitting & Process: Streamlined and user-friendly** - The current code creates difficulty for both growth and preservation. CodeNEXT streamlines the site planning and permitting processes. The use of more graphics makes it easier for both city officials and property owners.

At the time of writing, CodeNEXT is slated to have a final vote in April 2018, but before then there were a series of drafts and workshops held so the public could participate. The first draft of text was released in January 2017, the following April initial draft zoning maps were released. From there, workshops were held for public feedback and the second draft was released in September 15, 2017. The third and final draft of CodeNEXT was released on February 2018.

Imagine Austin has created a growth concept map²⁰ for the city that ties several networks including roadway, transit, bicycle and pedestrian, and environmental resources. The goals of the concept map are to (Imagine Austin, 2012):

- Promote a compact and connected city.
- Promote infill and redevelopment as opposed to typical low-density “greenfield” development.

²⁰ “The Growth Concept Map series and the activity centers and corridors are conceptual and provide direction for future growth; however, they are not parcel-specific, nor do they carry the legal weight of zoning designations or other land use regulations.” -Imagine Austin Comprehensive plan p. 97

- Focus new development in activity corridors and centers accessible by walking, bicycling, and transit as well as by car.
- Provide convenient access to jobs and employment centers.
- Protect existing open space and natural resources such as creeks, rivers, lakes, and floodplains.
- Direct growth away from the Barton Springs Zone of the Edwards Aquifer recharge and contributing zones and other water-supply watersheds.
- Improve air quality and reduces greenhouse gas emissions.
- Expand the transit network and increases transit use.
- Reduce vehicle miles travelled (VMT).
- Reduce per capita water consumption.
- Provide parks and open space close to where people live, work and play.

Focusing on the site, the area has been designated as an Activity Center for Redevelopment in Sensitive Environmental Areas. However, the South Lamar Corridor has also been designated as an activity corridor with high capacity transit. The image below highlights the South Lamar Corridor in the Growth Concept Map:

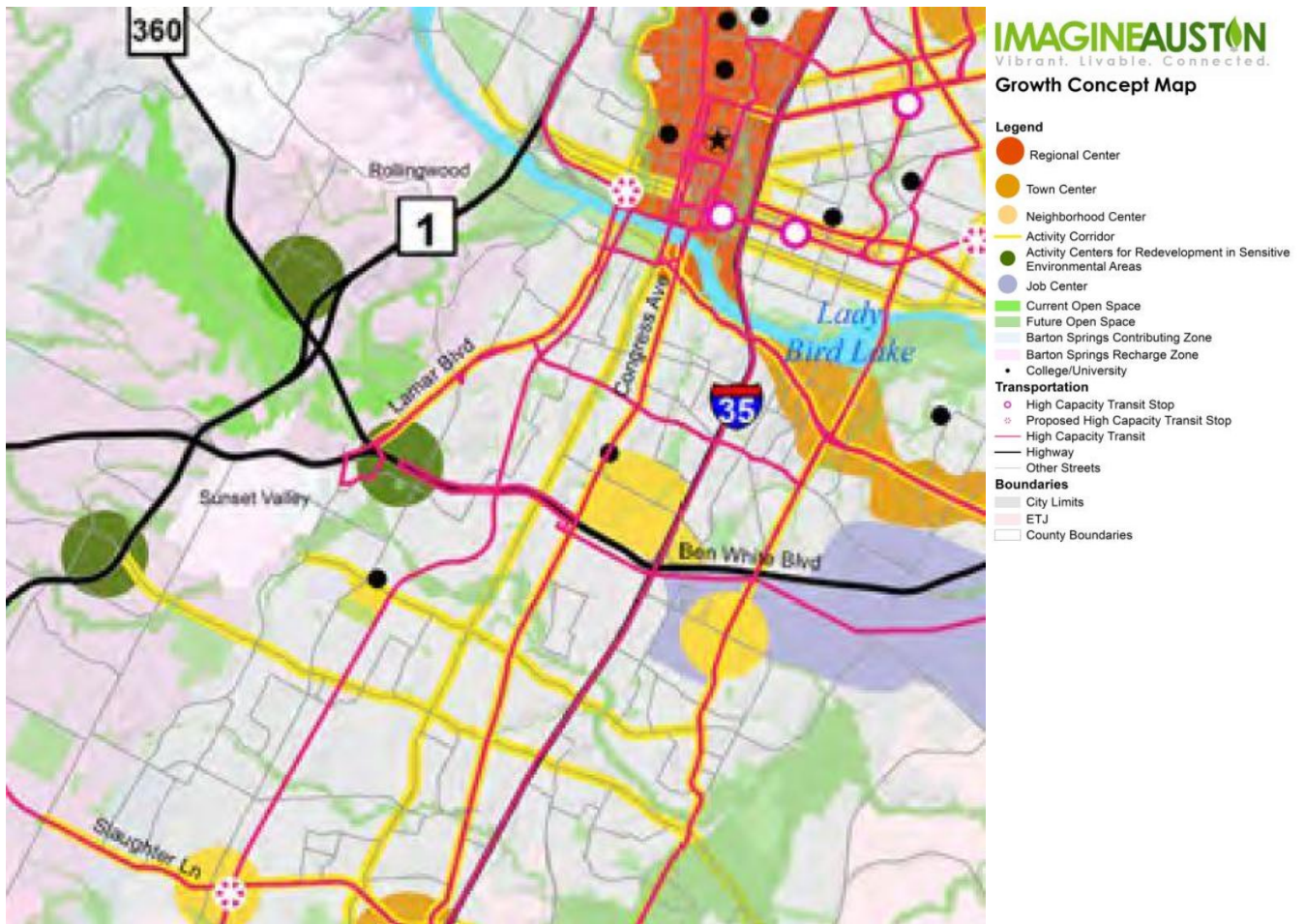


Figure 18: Imagine Austin Growth Concept Map

Based on these growth concept goals of the site, the following images show the current and proposed zoning of the site to align with the growth concept map:

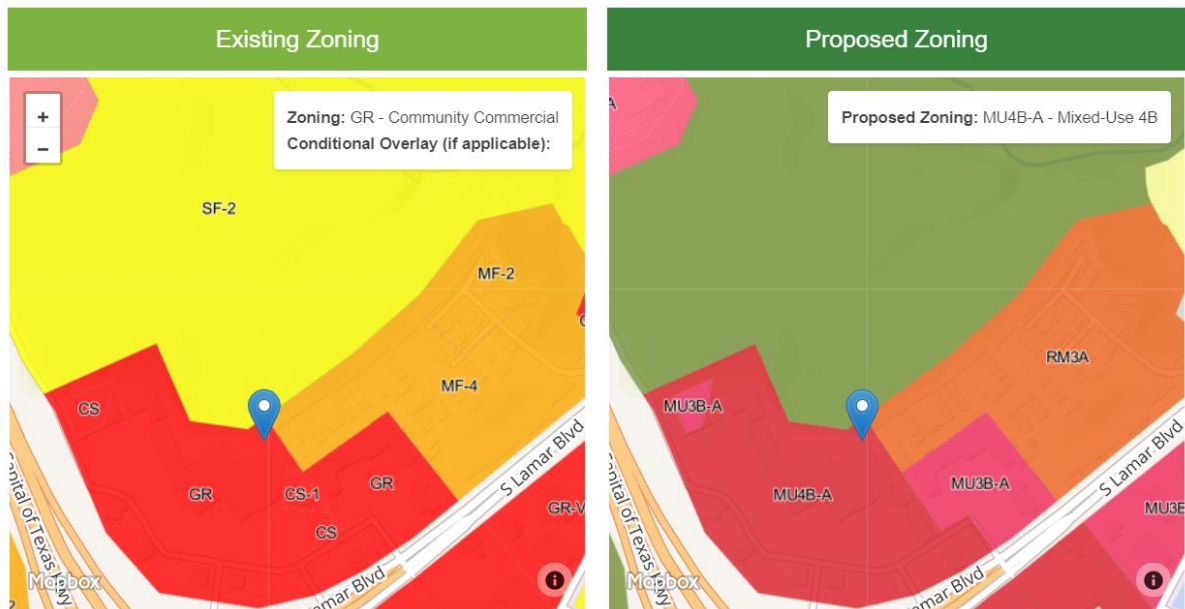


Figure 19: Current and Proposed Zoning of the Site.

Currently, the shopping center is zoned as Community Commercial (GR), this includes Sprout's, Neiman Marcus outlet etc. The proposed zoning for the center is Mixed-Use 4B-A. This has been described as a mixed-use zone that allows residential, medium-intensity service and commercial industrial users. The zone is intended to allow residential, medium to high intensity multi-unit residential, office, service, retail and entertainment uses.

The second phase of the center is currently zoned as Commercial Services (CS), this includes Toys R Us and the Brodie Oaks Plaza, where office space is located. This area has been proposed to be rezoned as Mixed-Use 3A (MU3A). The description for this zoning is one that allows residential, medium-intensity office, service, and retail uses. This

zone is intended to provide city-wide access to shopping and daily services that include general commercial, auto and service uses.

The parcel that lies behind the site is currently zoned as Single Family 2 (SF-2) ²¹, which indicates that this is intended for a moderate density single family residential use that has the minimum lot size of 5,750 square feet. The maximum units per lot is one, the maximum building coverage is 40% and maximum impervious cover is 45%. The permitted and conditional uses include residential (single family, bed and breakfast, and short-term rental), Civic (club, college facilities, community recreation and more), commercial (historic) and agricultural (community garden and urban farm).

While this site has been zoned as single family 2, what actually is behind the shopping center is the entry to the greenbelt. Currently this land is owned by the city of Austin and is a part of the Barton Creek Greenbelt. It is managed by the City's Parks and Recreation department and is 7.25 miles long. This leaves greenbelt access threatened by the possibility of being developed. Therefore, to align with the goals of CodeNEXT of protecting open space and natural resources, this area has been rezoned as CL Conservation Lands. Figure 20 shows current and proposed zoning of the greenbelt:

²¹ The greenbelt is owned by the City of Austin as of March 2018. Their interest in this land is a part of the mission of Austin Parks and Recreation, "Inspire Austin to learn, play, protect and connect by creating diverse programs and experiences in sustainable natural spaces and public places."

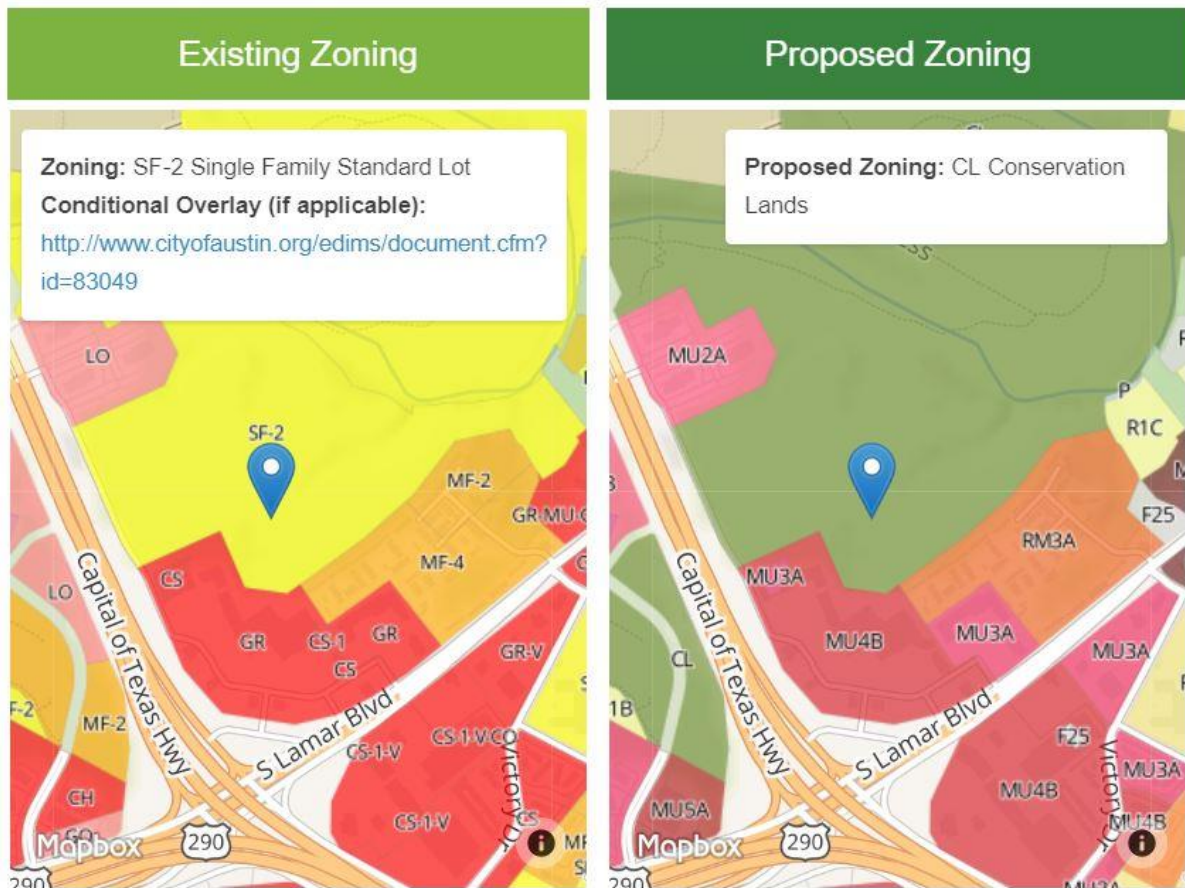


Figure 20: Current and future proposal of the Barton Creek Greenbelt

This zone designates areas of the City for which the public purpose is conservation of natural land in a form generally free from development. Natural recreation is the only land use allowed (CodeNEXT, 2017). No development is allowed, only outdoor recreation is allowed. The only development that can be allowed is parking for public access, trails, structures needed for nature education programs or observation of nature and restrooms (CodeNEXT, 2017).

The site located to the right of Brodie Oaks is owned by Lankford & Associates and is currently a multi-family of 30.22 acres. The land is currently zoned MF-4/MF-2 but has been proposed to be changed to RM3A, which is “Residential Multi-Unit 3A”. This indicates:

- Density: 36 units/acre.
- Most similar to current MF-3 and MF-4 Zoning.
- Max height of 60’.
- Front Setback of 15’.
- Building cover of 60%.
- Impervious cover of 70%.

While CodeNEXT has been a process that has involved the residents, outside council, and businesses, with the most recent draft that has been released, there has been criticism from all sides of the city.

Chapter 5: Methodology

Case Studies:

I will look at three sites that focus on Low Impact Development in Charlotte, North Carolina, a residential development project along South Lamar called the Denizen, and a redevelopment/mixed use project in Dallas called Trinity Groves.

Charlotte-Mecklenburg, North Carolina

While re-development is currently not proposed in the Brodie Oaks Shopping Center, one approach that could benefit the Brodie Oaks shopping center, adjacent greenbelt, and surrounding neighborhoods, and would align with Imagine Austin would be Low Impact Development (LID) and Green Infrastructure (GI) programs. Potential benefits of environmental, financial and social benefits of LID/GI include (EPA, 2015):

- Reduction in stormwater runoff – communities can help watersheds act more like undeveloped watersheds.
- Improved water quality – stormwater runoff can pick up pollutants such as oil, bacteria, and more. LID will reduce pollutants in stormwater, which will in turn increase property value and lowers government clean-up costs.
- Reduced number of costly flooding events – Implementing LID practices reduces the volume and speed of stormwater runoff.
- Restored aquatic habitat – Reduces the amount of stormwater reaching a surface water system and helps to maintain natural stream channel functions and habitat.

- Improved groundwater recharge – LID practices retain more rainfall on-site, allowing it to enter the ground and be filtered by the soil as it percolates to the water table.
- Enhanced neighborhood beauty – Can increase neighborhood property values and enhance communities by making them more beautiful, sustainable, and wildlife friendly.

Several cities are participating in LID/GI and are have measured their economic benefits. The city of Charlotte and Mecklenburg County in North Carolina partnered to protect drinking water quality, water quality for recreation, aquatic wildlife, and endangered species (EPA, 2013), all issues of great interest in Austin. The largest threat to the water quality in this region is the increase in storm water runoff caused by rapid development which contributes to pollution and sediment runoff (EPA, 2013). The LID components related to the capital improvements program concentrates in three areas: in-stream restoration, upland LID-based retrofits (such as rain gardens and bioswales) and reforestation. Huntersville (also located in Mecklenburg County) has gone one step further to implement a post-construction LID-based ordinance to mitigate degradation of the drinking water reservoir from future development.

Charlotte-Mecklenburg Storm Water Services (CMSWS) serves 890,000 people over 526 square miles. Recently due to rapid development, stream bank erosion has been the largest contributor of sediment in Mecklenburg's streams. As streams erode, sediment is deposited downstream. This leads to burial of aquatic habitat and altering the stability

and quality of streams ²². The County has used LID/GI methods to reduce the impact from rapid development on water quality for several years.

What makes Mecklenburg unique is the fact that the county approached this project conducting a cost-effective analysis in an important watershed to determine cost per pound of sediment saved for different LID/GI projects. The incorporation of LID by Mecklenburg County's LID approach stemmed from the watershed modeling that compared the effectiveness of alternative management to current (traditional) methods at build-out conditions (EPA, 2013).

The findings from this project was that LID/GI was the only approach that could achieve sufficient pollutant removal, but also was the most cost-effective way to immediately reduce sediment loadings from rapid development (EPA, 2013). Stream restoration techniques on average cost between \$0.60 to \$1.00 per pound of sediment managed compared to sediment removal costs that wet ponds and extended detention wet ponds provided: \$35 and \$69 per pound removed respectively excluding land costs (EPA, 2013). Between 2003 and 2016, around 30 miles of stream and 18 acres of wetlands had improved or were preserved throughout the county²³. To prioritize stream restoration projects, the county conducted a cost-effective analysis to determine the cost per pound saved for various LID/GI program components. One key factor of this project is that the County began to shift from implementing opportunity-based projects to implementing

²² Charlotte - Mecklenburg, Storm Water Services via
<http://charlottenc.gov/StormWater/SurfaceWaterQuality/Pages/StreamandWetlandRestoration.aspx>

²³ Ibid

need-based projects. This indicates that projects that are more in danger of failing (physically or have negative impacts on users) have priority over those that are not failing but bring in more opportunity (such as jobs or money) into the area. This strategy examined the number of drivers that influence selection and implementation of projects that will provide the most benefit.

An example in Charlotte is the Little Sugar Creek greenway. When the project is complete, it will have over 19 miles of trails and land connectors. The creek is on North Carolina's 303(d) list of bodies of water with impaired quality, mainly resulting from urban runoff and sewer leaks. Several land uses that surround the area include single family, multifamily, commercial/big box adjacent to the creek, and open space. The project was broken up into seven sections, between economic development/activity opportunity area and environmental conservation opportunities.

Little Sugar Creek will be a "space for quiet reflection or a social hotspot..."²⁴ The greenway will be built to create more use because of how diverse Charlotte is. The space will be for people like walkers, joggers, bikers, and more. The urban portion of Little Sugar Creek will include a major stream restoration project to improve water quality. The urban section runs 1.2 miles and construction was completed in spring 2010. The total cost of the project was estimated around \$34.25 million for 15 miles²⁵. These efforts are being funded

²⁴Mecklenburg County, NC via
<https://www.mecknc.gov/ParkandRec/Greenways/LittleSugarCreekGreenway/Pages/default.aspx>

²⁵ City of Charlotte-Mecklenburg via
<https://www.mecknc.gov/ParkandRec/Greenways/LittleSugarCreekGreenway/Documents/executivesummarysmall.pdf>

by both public and private entities including North Carolina Department of Transportation (a government agency), the North Carolina Clean Water Management Trust Fund and more. The benefits of Little Sugar Creek Greenway include at least \$3 of private development generated for every dollar spent on this project ²⁶. In addition, other benefits include:

- Neighborhood benefits (connecting and linking people to adjacent neighborhoods)
- Recreational benefits (providing hiking, biking, and other community-wide recreational activities).
- Active transportation (non-motorized users, connect to important destinations)
- Community benefits (festivals, space for special events).
- Educational benefits (Promote links to school, increase awareness education programs).
- Environmental benefits (Improve water quality, preserve wildlife and habitat, reduce flood damage).

The Denizen - Austin, TX

The Denizen is an 8.5-acre, mixed residential type that is located in South Austin, in the zip code 78704 (2.5 miles away from the Brodie Oaks Shopping Center and with the

²⁶ City of Charlotte-Mecknesburg
http://www.charmeck.org/mecklenburg/county/ParkandRec/Greenways/LittleSugarCreekGreenway/Documents/LSCG%20FACT_SHEET_.pdf

same zip code). 119 unit-condominium and townhouse community that is separated over three buildings. Amenities include bicycle storage, community gardens, community pavilion, walking trails, a pool, and more. One unique feature of the site is that there is an open space that is an amphitheater and also acts as a retention area for stormwater. This was originally developed as an affordable option for homebuyers in the area where the average price of housing is constantly on the rise; for instance, between December 2016 and December 2017 home prices increased 8.6%²⁷. Terry Mitchell, President of Momark Development, originally wanted homes in this development to be priced between \$175,000-\$350,000.

Mitchell originally acquired the site in 2008 from The Salvation Army. His idea was to create reasonable priced for-sale housing near the core of the city. However, with the financial crisis and recession following, the project was not feasible. During this time, Mitchell observed that people were still moving to Austin despite the lack of job growth. He concluded that population growth is a more important metric than job growth and saw the opportunity to follow through with the Denizen development.

The project was financed with several partners to share the risk. Ownership was split as follows (Schwanke, 2018):

- MarkSky Development LLC, managing member - 3.2%
- Momark Development - 40.9%

²⁷ Zillow, 2018.

<https://www.zillow.com/austin-tx/home-values/>

- Skybeck Development, LLC - 14.9%
- Two Drifters Ltd. - 29.8%
- Lippincott Capital Ltd. - 11.2%

The approval process for this project required rezoning to develop the property. During the recession, Mitchell engaged with surrounding neighborhoods and the city over several years to gain input and approval. There were in total 16 meetings with the community and neighborhoods. Approval for the development from neighborhoods was difficult. Residents initially wanted single-family detached units on the site to keep a similar style to the surrounding neighborhood (Schwanke, 2018). Neighborhood residents were also concerned with higher density, that if this area was rezoned that others would follow. However, relative affordability would not be possible as detached single-family housing units. Creating a community garden and open space were also an important factor in gaining approval from the neighborhood. Developing townhomes and open space as transitional areas near single family neighborhoods was crucial to gaining approval. As a compromise, the development had 22 units fewer than what was originally proposed (Schwanke, 2018).

The planning and design portion of this development evolved over time and came to fruition with design charrettes that included prospective buyers, designers, and developers to talk about goals and brainstorm ideas for the development. The final site plan that was created has every unit having a view of the amenity area. Some units will have views of the Hill Country to the west (Schwanke, 2018). The plan also includes 3.5 acres of open space in three separate areas and arranges 14 townhomes in duplex buildings along

South 5th Street where they will have front yards. The main entrance will be from South 5th Street where visitors will see the central amenity area, another entrance is located off of Cumberland Road (Chung, 2018).



Figure 21: The Denizen Site Plan. (The Denizen, 2018)

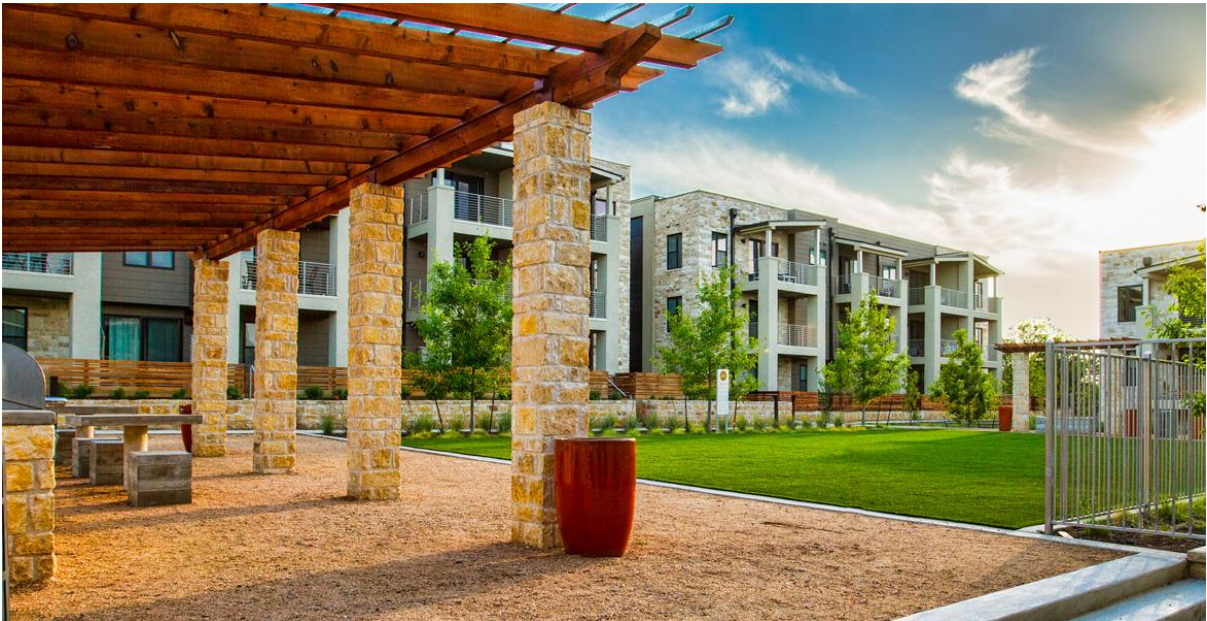


Figure 22: Central Amenity Area (The Denizen, 2018)



Figure 23: Trails leading into the park (The Denizen, 2018)

One element that ties the site together is the central amenity area. This central location includes a lawn area with artificial turf, a swimming pool, outdoor barbecue area and a club room adjacent to the pool (while this is not very LID friendly, its purpose is to serve as a community space rather than low impact development here). Residents often bring out chairs to sit and relax. The main idea behind the artificial turf is reducing use of water. This eliminated the need to water the grass and reduce erosion and mud during rainy days. The developers also wanted this space to be more of a high-performance sports surface rather than a lawn (Woodroffe, 2018). The lawn is also popular with children and used for movie nights in the community.

Another important element is the community garden, also known as “The Dig”. This garden had existed for more than 20 years in a different location on the site. The garden was one of the more important factors when drawing in buyers, “I would say five of the ten first sales were made in part because of the garden amenity” (Mitchell, 2018). The garden is maintained by the southeast community garden group, which includes residents and non-residents of the Denizen.



Figure 24: Community Gardens, “The Dig”. (The Denizen, 2018)

The third open space amenity is the amphitheater/retention area located at the northern end of the property; any additional runoff ends here. During heavy rainfall, the area can see up to 4 feet of runoff water which will be dispersed between 24 to 72 hours. However, this area is mostly dry and is used for recreational purposes. Limestone quarried from the surrounding Central Texas region was used to create walls on two sides and a terraced seating area on the third side. This is used for events such as concerts and performances (Schwanke, 2018). The theater is an example of multi-function amenities that are both aesthetically pleasing and also serve several purposes to mitigate heavy rainfall.

Rain gardens were created to address the issue of water quality and to create an element that will set the Denizen apart from other residential units. *dwg*²⁸. designed fourteen rain garden basins throughout the site to manage stormwater and water quality²⁹. The gardens are “long and narrow, walled and sunken”. Water flows into the gardens and remains here during rainfall. When there is overflow this will move downhill eventually reaching the retention area/amphitheater. *dwg.* envisioned that residents would “use the rain garden as a thing of beauty as opposed to a thing of engineering infrastructure... A big part of our agenda as a design firm was to make green infrastructure... seamlessly integrated into the design...” (Woodroffe, 2012) ³⁰.

²⁸ *dwg.* is a landscape architecture firm based in Austin, Texas. They are passionate about urbanism, positioning the landscape as green infrastructure and designing solutions that encourage social and environmental change.

²⁹ <http://studiodwg.com/denizen-imagine-austin-model-project/>

³⁰ Denizen Condominiums - Daniel Woodroffe, <https://www.youtube.com/watch?v=0fnsoluQvzA>



Figure 25: Amphitheater/Retention Pond & rain gardens at The Denizen (The Denizen, 2018)

The level of water quality was not required by the city. However, while more expensive, it resulted in a good marketing strategy for buyers (Chung, 2018). Planners and developers believed that the rain gardens would help with approval and marketing, an assumption proved to be correct.

The condos, by BSB Design ³¹, were designed to be through units with attractive views and allowing light to enter the second and third level units from two sides. All condo buildings have the same unit layout for the second and third level, either three one-bedroom units or two two-bedroom units. As a result, this led to an efficient design and construction

³¹ A national full-service architecture and design firm.

program, where the construction team was building the same building ten times, with some first level variety. The ground-level building plans included garages. All 25 ground level condos have a yard of around 300 square feet. The second and third-level units have balconies measuring 9'x11' that acts as outdoor rooms (Chung, 2018).

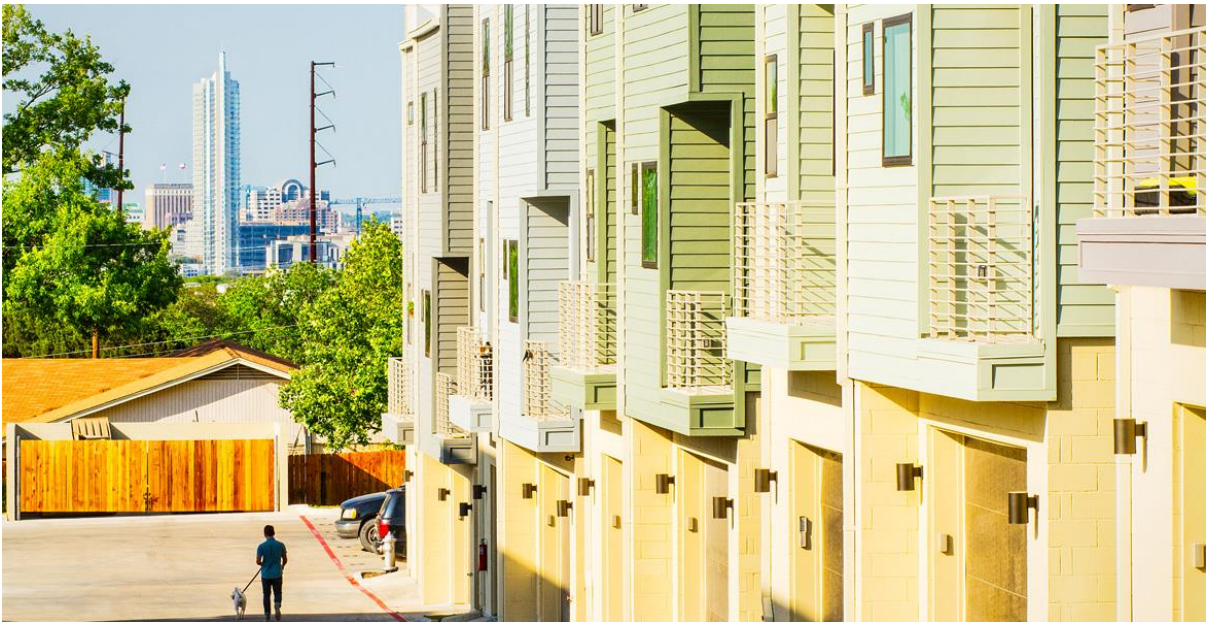


Figure 26: Condos by BSB Design

The duplex townhomes were placed along the east side along South Fifth Street, the front of the development where elevations are higher compared to the western half of the site. The purpose of this was for development to integrate with the single-family development across the street. David Copenhaver from BSB Design states that the duplex townhomes “really hide the three-story buildings behind, so you don’t really see the scale of this project at all because of the topography [and the design]” (Copenhaver, 2018). Trees

were also preserved in front of these homes to help with the approval process and allowed the units to integrate better with the neighborhood.

Observations and lessons learned:

A large part of the success of the project has to do with the open space plan. “Most properties of this size [in Austin] do not have nearly as much open space” (Skeen, 2018). The rain gardens and landscaping help shape how the buildings fit together. Mitchell had the idea of communities and gathering spaces. The communities that had the most gathering spaces are the ones with the strongest sense of community. His guiding question was “What can I do with this space?” (Mitchell, 2018). To create these open spaces for stronger communities, placement and sizing were also an important element to the success of the project. With the creation of three separate and different open space amenities, planners and developers made sure that all units would have access to all three while incorporating variety. Slopes and the aesthetically pleasing topography of the site created both opportunities and challenges. The retaining wall and special stormwater management was created because of the slope, but also formed a unique community environment.

Infill development attracts young buyers but comes with its own set of issues to address, one being bike storage. The Denizen underestimated the size of storage for bikes, for future projects, bike storage should be considered as essential when planning for infill development (Schwanke, 2018).

The idea of moderately low prices condos in an infill location is seen as risky from the lenders point of view. However, this was not the case for the Denizen. By having a

moderate price range the developer landed in a spot that created upside potential as the market improved from the recession. Other condos were more expensive (Chung, 2018).

Financing construction created issues for the project because lenders did not want to extend funds to for the whole project at once. As a result, the construction schedule and budget took a hit. The developers had to go bid for each phase when the market was quickly increasing in cost. They initially believed that there would be time limits for building permits and therefore did not apply to have permits for all of the buildings at once, which led to delays in obtaining them.

While the Denizen was being developed during the recession, the project was quick to develop during the recovery, taking advantage of the relatively low construction costs, limited competition, and significant price appreciation over the life of the project, all of which have greatly enhanced its financial performance since completion (Schwanke, 2018).

Trinity Groves - Dallas, TX:

Trinity Groves is a multi-phase redevelopment initiative of a former warehouse and light industrial site that started with the first phase of 10.3 acres that includes restaurants/specialty food incubator and destination. The site is located along the Trinity River across from downtown Dallas and near the Margaret Hunt Hill Bridge in West Dallas. When completed Trinity Groves will be around 100 acres.

Prior to redevelopment, the site was used as a warehouse and light-industrial area. However, with the opening of the Margaret Hunt Hill Bridge in March 2012, the site came to be attractive for redevelopment. The first phase of the site is around 10.3 acres and is bordered by Singleton Boulevard to the south, Pueblo and Toronto Streets to the north, the Trinity River on the east and Bataan Street to the west. Phase II will be 40 acres and Phase III will be 50.

Dallas city officials began discussing redevelopment in the area before the bridge was constructed. Trinity Groves LLC (formed by West Dallas Investments) was created to serve as the development entity. The partners created the LLC with the intention of creating a legacy. They are not looking to be “merchant builders, but rather partners who share a long-term vision.” The partners believe the project will take at least 20 years to develop entirely and are planning to maintain ownership interests in most of it.

West Dallas began purchasing land in 2005, without having a clear development concept in mind. The restaurant incubator idea did not come to fruition until 2011. West Dallas purchased 60 acres between 2005-2010 with a majority of parcels being commercial or industrial. The land was purchased at \$2.50 per square foot, by 2016 the land was selling for over \$30 per square foot. On the other side of the Trinity River, prices are around \$300 per square foot.

The whole site is planned in three phases; the first being a restaurant incubator, primarily to the north of Singleton, while the second and third would be mixed use to the south of Singleton. While in most developments office and residential buildings are

established first, however with Trinity Groves the area was not well enough established to attract Class A apartments, offices, or hotel space.

Once the incubator program was put into effect, Trinity Groves LLC rezoned 40 acres or the property south of Singleton into Planned Development (PD) 891, a zone intended for mixed-use development. This new zoning allows for 9 million square feet, unlimited building height and no minimum lot size ³². The flexible zoning allows for multiple uses with no prescribed use on any specific site. The only constraints are on height near the neighborhood to the north. In addition to rezoning, city officials added the site to the existing Sports Arena tax increment financing district in May 2012. This led to \$3.5 million in Tax Increment Financing (TIF) for Phase I. Phase II received \$13.9 million for road and infrastructure improvements and an economic development grant.

Opposition from the public for redevelopment was minimal, one reason being the adaptive reuse method used. “The surrounding neighborhood was not ‘shocked’ with bulldozers tearing down old existing buildings, because there were none that were torn down” (Reynolds, 2016). Phase II does involve demolition but this is located in areas that are not immediately adjacent to neighborhoods. The city created a rigorous planning and review process for the second phase that involved City Design Studio, a group created in 2009 that focuses on neighborhoods and development along the Trinity River. CDS worked with the city, community, property owners, and the design community to create a vision and guidelines for the area (ULI, 2016).

³² Downtown Austin in 1990 had 16 million square feet.

The first challenge for the developers was how to change the area's image. The developers had to "come up with a short-term plan that did not interfere with the long-term plan for the area..." (Reynolds, 2016). Reynolds came from the restaurant industry which is constantly in need of new concepts because of approaching new demographics that want something "new, different and exciting." During the planning of this project, Reynolds found out that young adults were having difficulty finding jobs, and so he wanted to give them the chance to create their own jobs.

One method of giving young adults the chance was a starting a fund that would invest in the incubator program. To date, investors have raised about \$12 million, which has provided about a 12% return as of 2016.

The restaurant incubator itself was an idea formed based on the following criteria (ULI, 2016). Each restaurant should:

- Be about 2,500 square feet (plus outside dining patios).
- Seat around 125 people.
- Create \$2 million per year in gross revenue.

The developers agreed to take from the fund \$500,000 for each restaurant to invest in finishes, equipment and more. In exchange, the Trinity Groves fund would own 50% of the restaurant which had to be co-owner operated and was required to offer a distinctive and creative concept. Those chosen were given financing, a location, and a 50% ownership in the restaurant. The remaining 50% would go to Trinity Groves. The restaurateur is offered a \$60,000 annual salary which is drawn against profits (ULI, 2016). In exchange

the restaurateur is required to pay a 5% management fee that would be split with the Trinity Groves co-owner, 6% of sales would go to rent and common area charges.

As of 2016, the total cost to date for the restaurant incubator was around \$24.75 million. This includes \$5.25 million for acquiring land, \$18 million in hard costs, and \$1.5 million for soft costs. Early investors and partners contributed \$12 million and another \$12.75 million was given in the form of a line of credit from Texas Capital Bank. The second phase, as mentioned earlier, has the city using TIF funds to invest in improving the infrastructure, including bond-funded projects to build upon three major roads (ULI, 2016). This specific TIF will end in 2042, but a separate TIF has already been approved to fund the third phase the south side of the project (ULI, 2016).

The first phase of development was the restaurant incubator development. This consists of 100,000 square feet of warehouse space that was adapted for restaurant and brewery uses. Developers when initially coming into the project did not want to come in with a substantial development footprint and begin to tear buildings down. They not only wanted to be respectful to the surrounding neighborhood, but also and to the overall feel of the existing architecture (ULI, 2016). Repurposing the building was a part of the overall strategy. Four buildings were planned to be renovated and adaptive uses. Open space was also an important element; the patios create a lively outdoor environment while expanding the seating area with minimal costs. The patios are surrounded with curtains that are flexible and semitransparent, and their height can be adjusted during the winter and summer. There is a breezeway that divides the north and south sides of the building which also provides pedestrian connections between the front and back of the site.

Behind the old terminal building, the second building, once a warehouse is now a barbecue restaurant and culinary education center. There is a tap room in the third building, the fourth is leased to a burger restaurant and other spaces that will soon be occupied. The first phase includes 555 surface parking spaces in several parking areas.

Phase II as mentioned, is designated as a mixed use urban redevelopment that will be significantly denser than the first phase (ULI, 2016). This masterplan was determined by several groups including the city, City Design Studio and The University of Texas, School of Architecture ³³. This area will be about 40 acres. The plan for the area involves designing a grid with blocks that are pedestrian friendly and also flexible within blocks to develop several uses and different building types. The current proposal splits the area into eight blocks that differ in size and includes buildings with 20 or more stories ³⁴. The plan for open space is to be linear and located along Akon Street with 40 to 60-foot-wide linear parks running along Singleton.

The first attempt to develop this area (Phase II) is the Cypress at Trinity Groves, an apartment project with three phases and is located across Singleton Avenue from restaurants. The first phase began in fall of 2015 and completed in mid-2016. The apartment complex has 352 units and 35,000 square feet of retail and restaurant space. In January 2017, construction of the second phase began. The buildings are four to five stories

³³ No further information on which University of Texas branch or faculty members were involved.

³⁴ Subject to change.

tall and have wooden frames on concrete podiums that wrap around concrete parking structures.

By June 2017, Cypress at Trinity Groves had around 100 residents living on top of 35,000 square feet of retail that is 60% leased, with more coming (Bunch, 2017). With several tenants interested, developers are looking for concepts with a point of difference, “We don’t want a Starbucks or a 7-Eleven,” quoted Jim Reynolds, head of the investment team (Bunch, 2017).

After this a 16-story, 223-room hotel is the next planned development to break ground. Amenities include a four-star restaurant, 15,000 square feet of event space, an infinity pool, skyline views and more (Bunch, 2017).

Lessons learned:

If implemented correctly, the restaurant incubator idea can be fruitful if experienced restaurant professionals and developers participate. Phil Romano, head of the Trinity Groves Investment team for West Dallas, explains that restaurants must have “authenticity, authenticity, authenticity. They need a bill of rights, a constitution, five things you stick to.” Establishing a restaurant incubator requires understanding how important authenticity means for a restaurant and for a collection of restaurants.

The investment in an architecturally iconic bridge by the city paid off in many ways; enhancing the skyline of the city, improving access to and from downtown, and creating an important new symbolic and practical connection between a once abandoned

area and the downtown, thus creating opportunity for revitalization that has been realized at Trinity Groves.

Putting together all of the parcels needed to make a large-scale redevelopment project function correctly is very challenging, takes up a lot of time, and requires patience and a low-key approach. The vision needed to put together enough acres to actually make a large-scale difference in West Dallas with over 170 transactions to purchase parcels, efforts have been going on for more than ten years. Many of these transactions have been difficult to do, as issues cropped up such as poor record keeping, issues with “chain of title, or recordation of ownership over many decades, unplatted/individual records, old public abandonments and easements, and unpaid tax bills on properties to be acquired” (ULI, 2016). Land sellers have also been holding out as well.

The atmosphere and quality of the “gritty” urban adaptation of warehouses into restaurants plays a significant role in attracting restaurant patrons, more so with young people. The project offers an unusual and compelling atmosphere while also offering diversity in food, restaurant owner/operator, and diversity in visitors and patrons. This differs from typical restaurant clusters in suburban shopping centers. Keeping the diversity and authentic nature as new development continues will be a challenge.

Restaurant clusters that are successful can be primary drivers in areas being redeveloped and can be effectively used to “rebrand” an area. The success of the first phase of Trinity Groves has re-energized this area of Dallas, erased decades of neglect and reduced crime in the immediate area to almost zero. “The success of Trinity Groves for us, is measured in multiple ways. Not only do we evaluate the economic success of each new

concept entity and returns to the investment fund, but we also measure the success by understanding how it has affected/is affecting the surrounding area in West Dallas, the city of Dallas, and Dallas county” (Reynolds, 2016).

The restaurant incubator program is the first of its kind at this large of scale in the United States, which was originally an experiment without a guarantee that it would work. While many people at first doubted the concept, it has attracted attention on a national scale. In 2014, Trinity Groves was awarded *Rehab/Reuse Best Real Estate Deal of the Year* by the Dallas Business journal, “In many ways, the reuse and rehab of what is there ties in with a theme overall project. Its organic type of growth pattern sets the stage” (Carlisle, 2014). Multiple developers across the county have approached Trinity Groves developers about starting their own programs to “jump start” redevelopment of neglected areas. Many of these areas have similarities such as being located in an old warehouse district and light-industrial districts like West Dallas. While developers do not know how the concept will translate to other areas throughout the United States, it should be tested nonetheless in other cities.

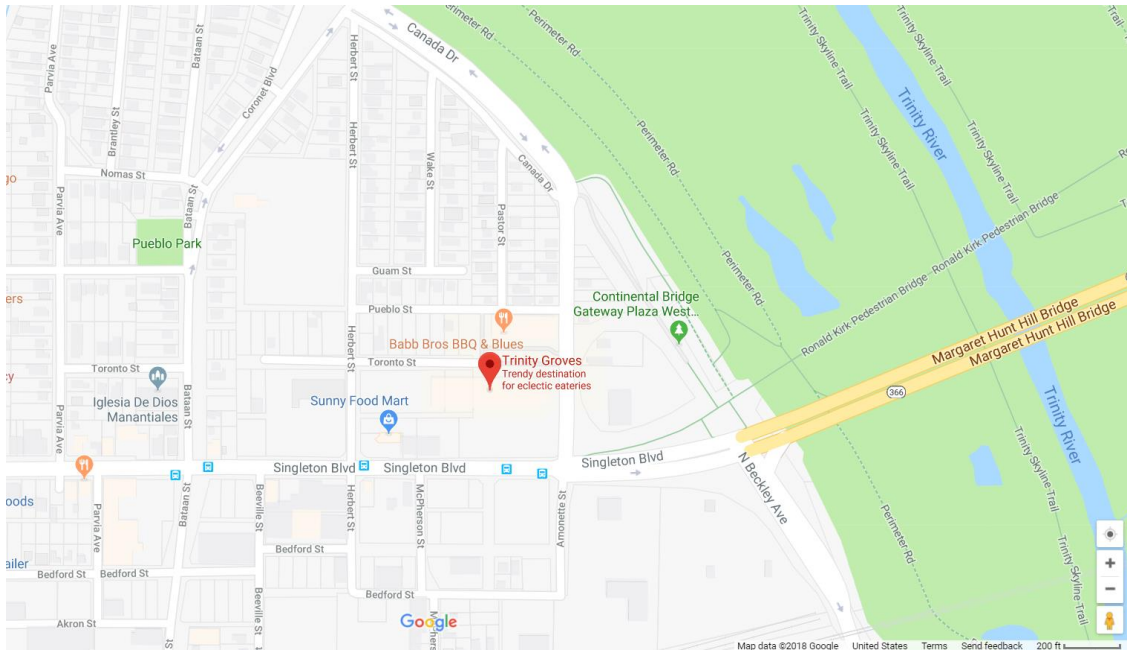


Figure 27: Trinity Groves location in Dallas



Figure 28: Restaurant Incubators



Figure 29: A conceptual rendering of the next phases of Trinity Groves, detailing the restaurant incubator, apartments, and offices.



Figure 30: Directory of Phase I

Article reviews/feedback about CodeNEXT from different perspectives of the community:

CodeNEXT has seen a lot of feedback from residents and developers in the city in the form of interviews, workshops, being able to leave comments on the code online and public meetings. Most of these comments have been negative from all sides of the spectrum. However, as of October 2017 most of the online feedback has come from Central

Austin, specifically the wealthiest parts of the city. As the map moves more out west, there is less feedback and it is almost non-existent on the eastern edges of the city, however the comments don't necessarily specify where the people who wrote them live (Hasan, 2017).

Austin Business Journal - Real estate experts break down latest CodeNEXT rewrite (2017)

Members of the Real Estate Council of Austin (RECA) sat down and gave their opinions on CodeNEXT 2.0 back in November 2017 ³⁵. Feedback came from members Scott Turner of Turner Residential, Megan Wanek of Endeavor Real Estate Group, and Terry Mitchell of Momark Development. They discussed what was potentially beneficial and missing from the Code (Salazar, 2017).

One central issue was compatibility which includes limits on the heights of structures adjacent to the property based on distance. Turner claims that the current compatibility requirement is one of the bigger limiters of the creation of housing units in the code (Salazar, 2017). He states the new version of compatibility in CodeNEXT 2.0 has a “steeper stair-step” approach to allowing certain building heights than existing rules, an improvement seen in the second draft.

Wanek of Endeavor (which has built the Domain and South Park Meadows) stated the second draft attempts to address flooding problems for larger properties but does not help with smaller lot developments “yet” (Salazar, 2017). “When it comes to infill

³⁵ Before CodeNEXT Draft 3 (The most recent draft) was released.

development, the proposal is that if you had impervious cover when you bought the property, you no longer get credit for that impervious cover,” stated Wanek. “You’re actually over-detaining and providing detention where you otherwise won’t ³⁶.” The property owner of the site would lose some rights but would solve the neighbor/city’s problem. When looking at it from a technical perspective, it’s a “one-size-fits-all solution (but) not a one size fits all problem.” States Wanek.

Mitchell said that the second version of CodeNEXT was missing a vision on “density nodes” that were spread throughout the city that allow people to live, work and play in the same area. He claims that densifying corridors absorbs a greater percentage of growth, therefore the rest of the neighborhoods are left closer to their existing conditions. Until density nodes are taken seriously, the pressure of wanting to live closer to downtown will continue to grow (Salazar, 2017).

The code recommendations from the three experts include stronger leadership role from the city to tell developers what works under CodeNEXT from Wanek. Turner believes there should be a reduction in regulations and that this would increase more affordable housing units. In addition, he believes there should be a change such as scaling back site-plan requirements for properties with fewer housing units. “That’s a high expense. And all these expenses again add up... That’s why today is not feasible to create an eight-unit apartment complex,” Tuner says. Mitchell says the code needs to be flexible with the diversity of Austin’s neighborhoods. Each neighborhood has its own characteristics, East

³⁶ Smaller sized developments, to qualify for tax credits proportionally have to develop more detention than they normally would in order to achieve certain tax credits in CodeNEXT draft 2.

Riverside is different from Burnet Road which is different from Hyde Park (Salazar, 2017). The three experts concluded with a message to get all members of RECA involved, as “the harder we try, the more likely we are to succeed,” states Mitchell.

American Institutes of Architects - Austin

The Austin Chapter of the American Institutes of Architects in October of 2013 created an advocacy group to focus on CodeNEXT. Its members believe this is the most important overhaul of many regulations affecting architects in Austin today.

The second draft of the code, they believe; remains flawed and does not support enough middle-income housing to solve affordability problems. Through a series of design charrettes, the advocacy group tested the proposed code to see what could or could not be built under the proposals³⁷ (Salazar, 2018). The original charrette report comes from the first version of CodeNEXT listed problems such as regulations against “missing middle” housing for middle income workers.

For the charrette, AIA Austin got together again reviewed CodeNEXT and repeated a variety of scenarios that ranged from a low-density part of Rosedale to downtown corners like Fifth and Colorado. The report stated that “much like the first draft, however, the second draft proved to have many limiting and confusing regulations.” While the second draft included missing middle building types, “they play a limited role due to obstacles” (Salazar, 2018).

³⁷ AIA - Austin’s scrutiny is regarded as some of the most credible (by Austin residents) as these professionals’ work with residents on a day to day basis.

While more units are allowed on certain lots, the new raft added regulations that can often burden the development to the extent that the allowable number of units is not achieved. The overlay restrictions on duplexes and cottages mean these could be underutilized in the new code. AIA Austin speculates that CodeNEXT will not be utilized to create more missing middle housing, therefore density will stay flat rather than increase (Salazar, 2018).

Austin Urban Land Institute - An analysis of CodeNEXT 1.0:

The Austin Chapter of the Urban Land Institute, in September of 2017, released an analysis of version 1.0 of CodeNEXT. While there are eight priority programs to implement the *Imagine Austin* Comprehensive plan, four are impacted by CodeNEXT. The four categories that are impacted by CodeNEXT and important to guiding the establishment of land development policy regulations are as follows:

- Environment – all efforts should be made to preserve and protect Austin’s natural environment, especially water resources, through the installation of ‘green’ infrastructure.
- Neighborhood character – Austin’s neighborhoods are unique and require careful, community-driven management as they evolve.
- Compact and connected – land development in Austin should promote high-density projects along transportation corridors, to reduce sprawl and the reliance on automobiles.

- Affordability – as the city grows, it is critical to maintain affordable housing and services. One of the best methods is to increase the available housing stock through zoning and land development regulations geared towards increasing density, especially in central Austin and around transportation corridors.

The purpose of the analysis published by the ULI chapter of Austin was to show that CodeNEXT 1.0 does not meet the standard for implementation of the priority programs that were highlighted in Imagine Austin. In addition to comments, ULI offers an action plan to align CodeNEXT more with the goals of Imagine Austin.

The first response is to the environment, Section 23-3D-3040(B) that is regarding impervious cover. This section specifically lists impervious cover calculations:

Section 23-3D-3040(B) - Impervious Cover Calculations Include:

1. Roads
2. Driveways
3. Parking areas
4. Buildings
5. Concrete
6. Impermeable construction covering the natural land surface
7. For an uncovered wood deck that has drainage spaces between the deck boards and that is located over a pervious surface, 50% of the horizontal area of the deck and
8. The portion of a site used for the storage of scrap and metal salvage, including auto salvage.

The first amendment, ULI believes that as Austin continues to grow, the city must maintain impervious cover limits and include proper treatment of stormwater runoff to preserve open space and urban parks, but too much regulation could result in hurting growth and urbanism in the city. A way to safely expand the urban footprint is to track and treat impervious cover based on the type or use of the impervious cover (ULI, 2017). Since there are high-pollutant (drivable surfaces) and low-pollutant loaded impervious cover (sidewalks and rooftops), the impact of these impervious covers is different on the environment. Identifying these two will allow more dense and urban development. This will also allow preservation of existing green space or use of such spaces for low-pollutant treatment of stormwater.

By distinguishing the definition, the city can maintain open spaces and the urban forest without underutilizing parcels for unneeded water quality controls. Expanding the identification and treatment requirements of impervious cover will allow and create incentives for compact and connected development which will result in housing supplying increasing affordability. The decrease in cost of water quality will also have a positive effect of housing affordability in Austin. Clarifying the code will also allow for further preservation of green space and expanded water quality options that are appropriate for an urban environment (ULI, 2017).

The second amendment in the environmental section is Section 23-D-6030(A), Water Quality Control and Green Stormwater Infrastructure Standards. Treatment of stormier runoffs to remove pollutants is just as important as tracking impervious cover. In addition to recognizing low and high pollutant impervious cover, CodeNEXT has to allow

for green and urban types of water quality treatment that can be more efficiently be built and effectively be utilized and maintained within a compact/urban setting. ULI recommends, “CodeNEXT must expand allowed water quality mechanisms based on varying pollutant-load runoff” (ULI, 2017). Expanding the allowed types of water quality controls will allow more efficient site design and encourage compact and connected development. The change will also allow for site design that can better protect existing environmental features and protect neighborhood character.

The third amendment for the environmental section is providing flexibility in environmental preservation and landscape requirements for section 23-4E. ULI implies that, “CodeNEXT must create a flexible system to provide site-specific environmental preservation” (ULI, 2017). If the city considers the unique characteristics of many different areas and neighborhoods of Austin, as well as the array of existing lot sizes and types, there has to be a flexible system included in CodeNEXT that allows the preservation of the highest priority features of a property while allowing a connected urban development. One tool used is pre-designed conferences that allow for joint City and development team review to prioritize site characteristics, neighborhood patterns and existing environmental conditions. One other tool that could be included would be landscape/environmental preservation that guides the top environmental priorities by that area. Using these tools allows creativity of design while insuring minimum standards protection such as buffers, tree protection and more. This approach could also encourage compact and connected development and neighborhood character without decreasing important green space.

The second category is neighborhood character. For this a work group looked at four items:

1. Preservation of existing housing.
2. Guidelines for construction of new housing.
3. Individual character of each Austin neighborhood.
4. Compatibility of commercial and residential uses.

The first amendment is allowing flexibility in types of housing allowed in all zones, Section 23-4D-2060 (Building Types Overview). ULI recommends, “CodeNEXT must allow flexibility in building types and allow all types of multi-unit buildings in all neighborhoods.” By encouraging any type of multi-unit dwelling within a lot will allow for more efficient use of the land and increase housing supply. This will have a positive impact on affordability and discourage only single-family development within neighborhoods, this will also encourage compact development and mixed use. The increase in flexibility in dwelling types and building footprint also allows for better preservation of neighborhood and environmental features specific to a property.

Amendment 2 refers to Section 23-4D 4030, 4040, and 4050: “CodeNEXT must include specific guidelines for additions and renovations to existing structures that allow administrative approval and are separate from form-based requirements.” Version 1.0 has strict regulations about development and remodeling within transect zones. The current proposal would have many residential remodels requiring approval from the Board of Adjustments, increasing time and costs to the process with the potential of encouraging

new demolitions for new developments. Preservation of neighborhood character cannot be reached without the flexibility to remodel old, existing residential units in neighborhoods.

Remodeling existing homes into single or multi-unit housing allows for preservation of old Austin neighborhood character while increasing housing supply for the market at an affordable rate. This method of preservation creates the least impact on the environment.

The third amendment refers to allowing flexibility in redevelopment on existing irregular lots (Section 23-4D-2060). ULI recommends, “CodeNEXT must allow more flexibility in building forms, setbacks, step backs, and buffers to better suit existing lot sizes and shapes.” As transect zones have been introduced, these can be beneficial for growth, however the first version of the zones severely limit development on existing, odd shaped, or steep graded lots, or lots with natural features such as trees that would interfere with the required building envelope. By increasing the flexibility of development on these lots, more efficient use of lots within Austin neighborhoods can be achieved. This will allow more environmental preservation of the existing tree canopy and waterways, both of which are part of the unique character of Austin. Restricting effective development on these lots will have negative impacts on the characteristics of Austin’s neighborhoods.

Austin should grow as a compact and connected city. However, there are some areas that need to be re-examined. Regarding Amendment 1, “Increase density of zones along Imagine Austin Corridors and Regional Centers”, ULI recommends, “Along the Imagine Austin Corridors and in Regional and Town Centers, properties shall be zoned with high density transect zones (T4, T5, T6) (ULI, 2017).” The proper zoning map

encourages density along the corridor rather than in areas of towns that are better suited for low density development or preserve land/parkland. By increasing the base zoning along the City's corridors, it will encourage preservation of neighborhoods rather than redevelopment within them. It will also encourage preservation of neighborhoods rather than redevelopment within them. Increasing density allowed on properties along the corridors will also create more affordable housing.

The second amendment is to prioritize Imagine Austin over Neighborhood Plans. ULI recommends, "CodeNEXT must prioritize the density of Imagine Austin ahead of the density maps (FLUMs) and the Neighborhood Plans (ULI, 2017)." Neighborhood plans add an additional layer of density restriction over current zoning in Austin. By prioritizing the Imagine Austin comprehensive plan, there will be higher density along corridors that will ultimately preserve the lower density of many Austin neighborhoods. Following Imagine Austin will increase the housing supply which directly impacts affordability goals of the Strategic Housing Plan.

The third amendment is to establish a connectivity plan, ULI recommends, "Establish a Connectivity Plan that encourages transit-oriented development and incentives developments that provides non-automobile connectivity (ULI, 2017)." Compact and connected development can be encouraged by CodeNEXT by creating a plan that incentives developments near Regional and Town Centers and allows connectivity improvements as an alternate solution to traffic. Creating density in the correct locations near transit options and encouraging spending on connectivity to transit will decrease the demand for automobile use and parking. A decrease in these also create opportunities for

additional density opportunity, creating more affordability, and reduces environmental concern from impervious water runoff.

The fourth analysis involves affordability. Members conducted an analysis and gave recommendations of ways to keep Austin's cost of living down and increasing job growth and wage. Their first amendment is mentioned earlier in Compact and Connected of along Imagine Austin corridors and in Regional and Town centers, properties must be zoned with high density transect zones. An increase in zoning will present additional opportunities for denser developments as demand exists within the population of the city.

The second amendment is to reduce prescriptions within form-based regulations, ULI recommends, "CodeNEXT must reduce prescriptions from the form-based regulations and create flexibility for efficient development" (ULI, 2017). Form-based codes provide an opportunity to allow a city to grow and preserve unique characteristics, but too much regulation can stunt opportunity and growth. Reducing the amount of form-based regulations will allow for efficiency on existing lots, including irregular ones.

The third and final amendment relates to increasing base density rights and making an incentive for density bonus. ULI recommends, "CodeNEXT can further increase the affordability housing options in Austin by increasing base density in all zoning categories and creating an incentive Density Bonus." An increase in base density rights encourages development of the housing supply in all parts of Austin and a variety of product types. More supply of housing at each income level will offset demand and allow rents to more closely align with income levels. The density bonus program needs to be reevaluated to create more incentive to build more affordable units. While these comments were created

for the first draft and the third draft has been recently released, it is critical to see if these amendments have been addressed.

Urban Land Institute - Austin, Position Papers:

ULI Austin has also put out position papers. Between November 2016-April 2017, ULI Austin hosted a series of member-led roundtable discussions to examine CodeNEXT and focused on specific areas where ULI could have the most impact. Specific position papers that could have the most impact on redeveloping the Brodie Oaks Shopping Center include Regional Infrastructure, Parking and Impervious Cover and Compatibility and Transition Zones.

Regional Infrastructure

The Regional Infrastructure position paper was published on April 10, 2017 and was a collaboration effort of Megan Wanek, P.E. of Endeavor Real Estate Group, Ricky DeCamps, P.E., Big Red Dog ³⁸, and Stephen Delgado, P.E., Texas Engineering Solutions. They have identified that along the Imagine Austin corridor and in areas of desired high density, the gap in infrastructure is beginning to disincentivize development thereby hurting the goals of Imagine Austin, “Better planning related to the City’s infrastructure is critical in furthering the goals of Imagine Austin and achieving the goals of the Austin Strategic Housing Plan” (Wanek, DeCamps, Delgado, 2017). The position includes

³⁸ A Texas based- civil engineering firm specializing in civil, traffic, transportation and MEP (mechanical, electric, and plumbing) engineering.

feedback from the development community on how CodeNEXT and new development might assist in closing the gap in infrastructure. The three key goals to addressing the infrastructure gap in the City of Austin are:

- Proper management and future planning of public infrastructure
- Clearly defined and timely process, as well as the creation of resources, for proper evaluation of existing infrastructure, with a priority focus along Imagine Austin corridors.
- Clearly defined methods to fairly allocate the responsibility to repair and/or upgrade public infrastructure in all parts of the City.

City Management and Future Planning of Infrastructure:

Currently in the city, there are several departments that manage several types of public infrastructure. These includes water utility, flood management, the transportation department and more. However only one of these departments, Austin's water utility, currently has a formal (but not codified) system to manage existing resources and evaluate regional planning needs in early stages of development. The other departments are limited in resources relative to managing and planning for infrastructure needs. They recommend that while CodeNEXT does not discuss City organization and management, more resources invested into management, mapping and planning efforts for all of these departments will improve the development process relative to public infrastructure and increase the rate of Austin meeting its housing goal (Wanek, DeCamps, Delgado, 2017).

Existing Infrastructure Evaluation: Improving the Process

Understanding where current infrastructure gaps in the system exist and where development and density are desired but not planned for is an important to help close the same gap. The traditional process has been that the development community has the responsibility to evaluate the city's existing infrastructure system when a new development is proposed. As a result of this process this leads to infrastructure assessments that are (Wanek, DeCamps, Delgado, 2017):

1. Limited in scope to a specific segment of a corridor, neighborhood or watershed
2. Are not inclusive of adjacent developments or future growth
3. Are reactionary to known issues within a corridor/watershed.

In addition, these studies also take a lot of time and costs which leads to a slowing in the development process and inhibiting the ability to get necessary housing and infrastructure built.

Evaluating the city's infrastructure would allow a proactive approach minimizing the infrastructure gap and planning for density in the future. These evaluations could be used by the City to recognize and use public funds (such as bonds, Tax Increment Financing etc....) to prioritize funding to areas of high density like TODs and centers. The development community could also benefit by evaluating project sites, understanding the best way to manage development cost and therefore be better able to streamline the development process. Together the City and developers could use funds more efficiently

towards infrastructure improvements if the opportunity arises to plan for these improvements in advance (Wanek, DeCamps, Delgado, 2017).

The code goals created by the feedback from Wanek, DeCamps, Delgado are as follows:

1. CodeNEXT should create criteria for a direct, timely, infrastructure assessment study for a property that covers all types of publicly managed City Infrastructure. The study should provide information including; existing infrastructure availability, the City's plan for infrastructure, future density desired in the area, and funding/improvements that may be required for development (that is mentioned in Imagine Austin)
2. CodeNEXT should establish a process for determining responsibility and process of an Infrastructure Assessment Study
3. CodeNEXT should establish policies as to how the City shall offset the cost of a privately prepared Infrastructure Assessment Study.

ULI Position Paper - Compatibility Transition

The second position paper is regarding Compatibility and Transition Zones. This is pertinent to the Brodie Oaks shopping center as the area has been designated as an "Activity Corridor for Redevelopment in sensitive Environmental Areas". The South Lamar corridor itself has been designated as an activity corridor and with high capacity transit. This position paper provides insight on the strengths and weaknesses of the CodeNEXT in these zones.

The focus of the subcommittee is to determine how CodeNEXT addresses the concepts of compatibility and transition zones, where there have been “improvements to the toolbox” of code provisions and where areas could be improved. It is noted that what has been published as of April 2017 is a step in the right direction but can be improved ³⁹. Members that formed this paper include; Margie Burciaga from Independence Title, Kate Tomlinson from Walter P Moore ⁴⁰, Fred Evins with the City of Austin, Greg Anderson from Austin Habitat for Humanity, and Jason Qunell from University Federal Credit Union.

Strengths of Transect/transition zones in CodeNEXT:

- “Article 10 - Compatibility” has been removed, compatibility issues are now addressed in base zoning districts.
- T5 - Main Street Transect allows more density on small lots by reducing transition/setback zones.
- Accessory Dwelling unit (ADU) are allowed in more base zoning districts.
- Live-work product is allowed.

Weaknesses of transect/transition zones in CodeNEXT:

- Neighborhood Plan Overlays (NP) take precedence over base zoning entitlements where the two conflict. Existing NP’s currently overlap at all corridors and transect zones.

³⁹ Draft 3 has not been given any feedback from ULI as of 3/12/2018.

⁴⁰ An International company of engineers, architects, innovators and creative people who solve some of the world’s most complex structural and infrastructure challenges.

- T5 Transect restricts too large of densities by limiting the depth of the 4th-6th stories.
- T3 & T4 Main Street Transects only permit very low development density.
- Main Street Transects permit very low development density.
- Main street frontages are required to be “retail or gallery uses,” which is too limiting.
- A commercial use is required on ground floor to increase allowable height of residential, which causes restrictions for the “missing middle” throughout neighborhoods.
- Small businesses cannot afford the costs required to meet city requirements for a commercial plan review.

The subcommittee has also offered recommendations on Code and Process considerations such as;

- From 2014-17 the City of Austin Planning Commission did not have any renters on the board. During this same time 55% the city’s household were renters. The city must have a balanced representation on planning and zoning committees prevents certain concerns from being heard.
- As of now only the consumer is responsible for deadlines on a project. Large expenditures that negatively affect affordability issues are passed along to the

consumer instead of The City. The consumer is also sharing responsibility for time management through residential and commercial plan reviews ⁴¹.

Recommendations for CodeNEXT from the subcommittee (Burciaga, et. al, 2017):

- Clarify the definition of “missing middle” and create adjustments for what projects fall into residential plan review compared to commercial plan review. Today, anything over 3 units requires commercial plan review which is twice to permit as a residential review.
- Maintain consistency throughout the code for “user names”, “permit uses”, and “use permissions”.
- Have each Council districts determine where and how they will allocate their share of Austin’s anticipated growth. The growth is inevitable and cannot all go downtown. In the next ten years, the city will need at least 135,000 housing units.

Density appropriately placed include benefits such as:

- Spread density allows for more housing choices (that includes missing middle) throughout Austin.
- Density along transit corridors that does not conflict with the heart of adjacent neighborhoods.
- Public services and infrastructure are provided and maintained in an efficient manner and the cost is spread across more residents.

⁴¹ ULI Austin “Process and Culture” Position Paper, April 2017

- Options of transportation are increased, density supports transit investments.
 - Urban amenities/local commercial services are provided within a walking distance.
 - Preserve natural open space by reducing pressures of sprawl.
- Support efforts to make development more predictable by increasing entitlements by right under base zoning districts.
- Remove neighborhood plans as a placeholder.
 - Giving Neighborhood Plans overlays precedence over all base zoning districts (transect and non-transect) prevents CodeNEXT from the goal of aligning with Imagine Austin
- Instead integrate neighborhood plans to the largest extent as possible within the Zoning Map (such as have the layout of new base zoning districts respond to existing NP). Have neighborhood plans act as visioning documents instead of regulatory instruments.

To conclude the subcommittee believes that neighborhood plans not taking precedence over base zoning is the most critical issue to preserving the vision of Imagine Austin. Density that is appropriately placed will improve:

- Household affordability (increase housing choices and reduce tax benefits)
- Transportation/congestion
- Environmental sustainability

- Development process

Austin Monitor - CodeNEXT Draft 3 makes significant changes to water-quality and drainage regulations

Matt Hollon the manager of the Watershed Protection Department Planning Division gave the Environmental Commission an overview of the relevant changes between the second and third draft. However, between the two there were almost no changes (Devenys, 2018).

When looking at the code in fine detail, the third draft is very similar to the current land development code. Aside from the controls on water quality and drainage, regulations implemented during the last 30 or 40 years will stay the same as they are (Devenys, 2018).

The largest change will take place with the water quality and drainage proposals. Hollon described the proposed regulatory changes in water quality but stated that the city has moved to a green stormwater infrastructure approach for water quality. The idea behind this is to use mediums such as rain gardens, green roofs, rainwater harvesting and porous pavement to capture and treat water that flows from properties to help at the same time with drainage and irrigation. Hollon stated that these controls would help incrementally halt an increase in localized flooding, however they would not fix flooding overnight. They would instead just prevent flooding from getting worse.

The watershed protection department estimates that 2,000 properties experience localized flooding issues due to a stormwater runoff and undersized drainage systems. These green stormwater proposals intend to help with site runoff, but the main idea is to

make irrigation more affordable by creating a system to use previously collected water and have the city offer credit for holding onto the stormwater, Hollon described this as “We can basically have our cake and eat it too” (Devenys, 2018).

These requirements are not only limited to commercial spaces; now residential projects will be required to implement green stormwater infrastructure as well. Historically, environmental and drainage regulations have not been designated at the individual lot level. The new infrastructure requirements would mainly be used for properties that are currently being built or redeveloped and would be implemented at the subdivision level (Devenys, 2018). “CodeNEXT is asking all projects to do their fair share” states Hollon.

Chapter 6: Proposal

Based on the history of the Brodie Oaks Shopping Center, history of shopping centers, case studies, and CodeNEXT feedback, I will now transition into proposals for redevelopment of the Center. Brodie Oaks Shopping Center was planned for zonings MU4B-A and MU3A, the entire site has two zonings and Lionstone will theoretically own the entire site. Both MU4B-A and MU3A are eligible to participate in the Affordable Housing Bonus Program (which I will talk about more later on). The goals for this proposal was based on case studies, feedback on CodeNEXT, location of the site, the three E's of sustainability and environmental restrictions are as follows ⁴²:

- Propose building footprints that will increase affordability in along the South Lamar Corridor.
- Propose Low Impact Development that will prevent stormwater runoff from pollution the Barton Creek Greenbelt and the possibly the Edwards Aquifer, using similar methods that Charlotte-Mecklenburg, NC used.
- Propose water conservation on the site with areas such as bioswales, stormwater collection and storage, similar to the Denizen.
- Creating several formal entrance points for the Barton Creek Greenbelt onsite where residents and visitors will feel safe about these accessible points.

⁴² These programs were designed with CodeNEXT Draft 3.

- Reducing impervious cover and creating more pedestrian/bike/trails that connect to the Greenbelt. These trails will also run parallel to roads and connect to the Metro Rapid 803 Bus Stop to encourage public transit.
- Create a Park and Ride with the apartment complex adjacent to the 803 bus stop.
- Create mixed use buildings that include live work spaces that can be owned or rented.
- Have a mixture of multi-family buildings be for rent and for sale.
- Include office space and live work units to encourage live, work, play to decrease the use of vehicles as much as possible and create a sense of community for residents and visitors, similar to Trinity Groves.

Figure 31 displays a sample land use map that proposes uses that range from residential to commercial that would benefit the site economically and environmentally. In this example I will use the rebranded name: Lamar 71.

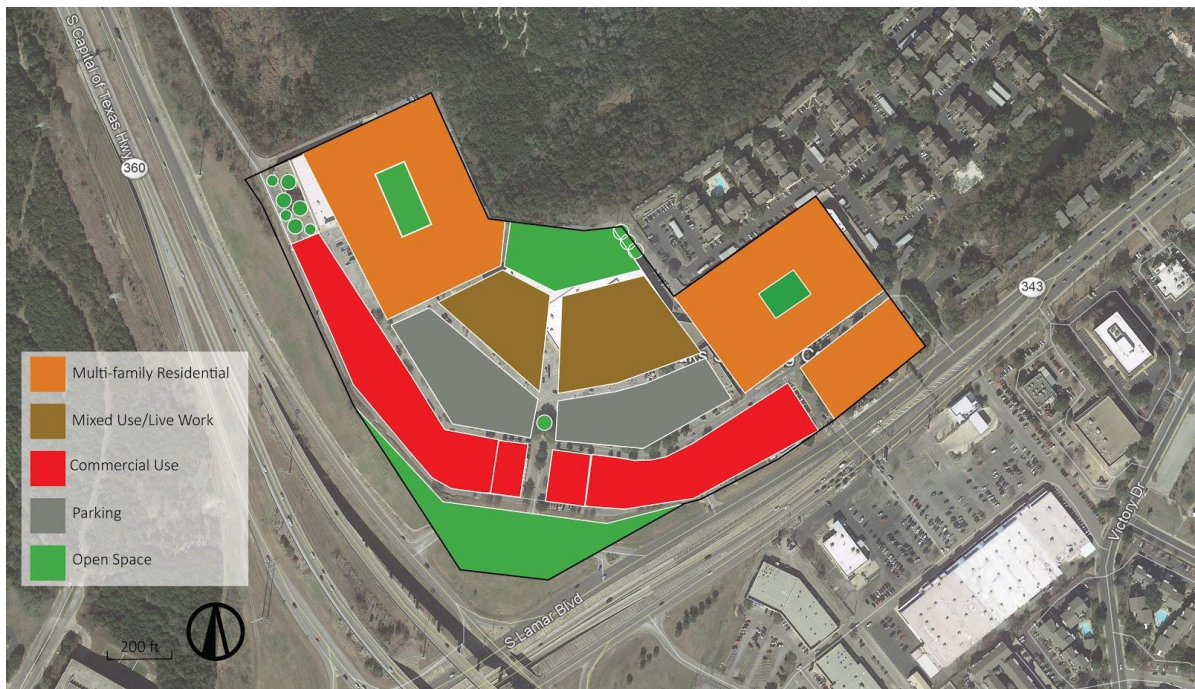


Figure 31: Sample Master plan of the redeveloped Brodie Oaks Shopping Center, Lamar 71. Parking is not shown in residential/retail units.



Figure 32: AutoCAD image that labels the buildings and open space at Lamar 71

Figure 33 displays a 3D view of the basic building footprint to illustrate how building footprints would integrate with the surrounding environment ⁴³.



Figure 33: 3D bird's eye view

This would result in the following:

Residential

- 35 Residential Studio Units (Average 488 square feet per unit)
- 284 1 bedroom, 1 bath units (Average 719 square feet per unit)
- 288 2-bedroom, 2 bath units (Average 1,057 square feet per unit)
- 49 3-bedroom, 2 bath units (Average 1,364 square feet per unit)

⁴³ The following images are loaded into Google Earth with the 3D building option picked. While this option has been chosen, most buildings and all cars are only in 2D therefore making the masses look larger than they actually are.

- 1,000 residential parking spaces ⁴⁴. These will all be tucked under the residential units.
- Building U will have 3 floors of parking spaces while the top two levels will be residential units
- Building J will have 3 floors of parking spaces and the upper two will be residential units.

Office

- 145,588 square feet of office space.
- 300 office space parking spots ⁴⁵ (Buildings B&G two floors of structured parking shared with retail space).

Retail

- 304,402 square feet of retail space including mixed use developments.
- 870 parking spots for retail ⁴⁶ (Buildings B&G will have two floors of structured parking shared with office space).
- 644 parking spots in O & P (There will be reserved spots for mixed use residents).

Open Space

- 1.37 miles of trail (excluding the entrance to the greenbelt) ⁴⁷.

⁴⁴ 23-4D-4040(A) - Group Residential - 1 space plus 1 per every 2 bedrooms.

⁴⁵ 23-4D-4040(A) - Office/General - 1 parking space per 500 square feet after the first 2,500 square feet.

⁴⁶ 23-4D-4040(A) - Retail - 1 parking space per 350 square feet of retail space.

⁴⁷ These trails will run parallel with the streets in the development and will wrap around the site.

- 84,671 square feet of open space/community that would include space for an amphitheater (excluding residential community spaces).

LEED Certified buildings (silver level at the minimum).

150 Parking spaces for the Park and Ride next to the 803 Rapid stop that will occupy the first level of building I ⁴⁸.

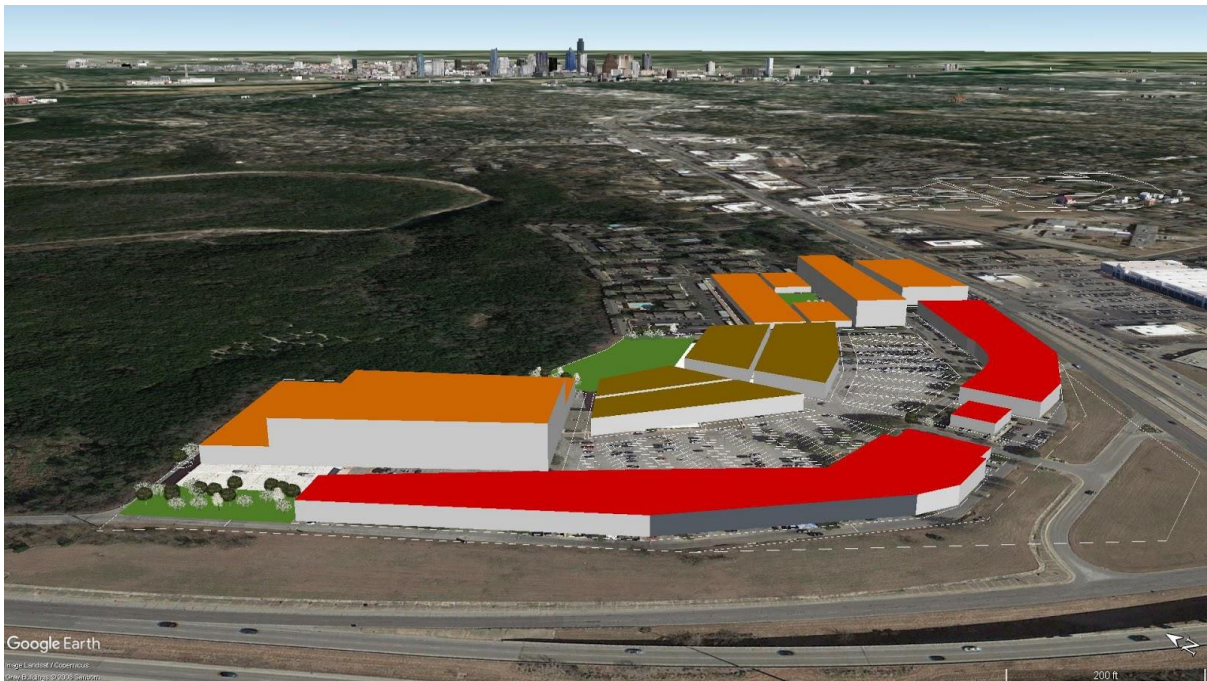


Figure 34: Birds Eye View looking East towards Downtown

⁴⁸ The letter I, not number.

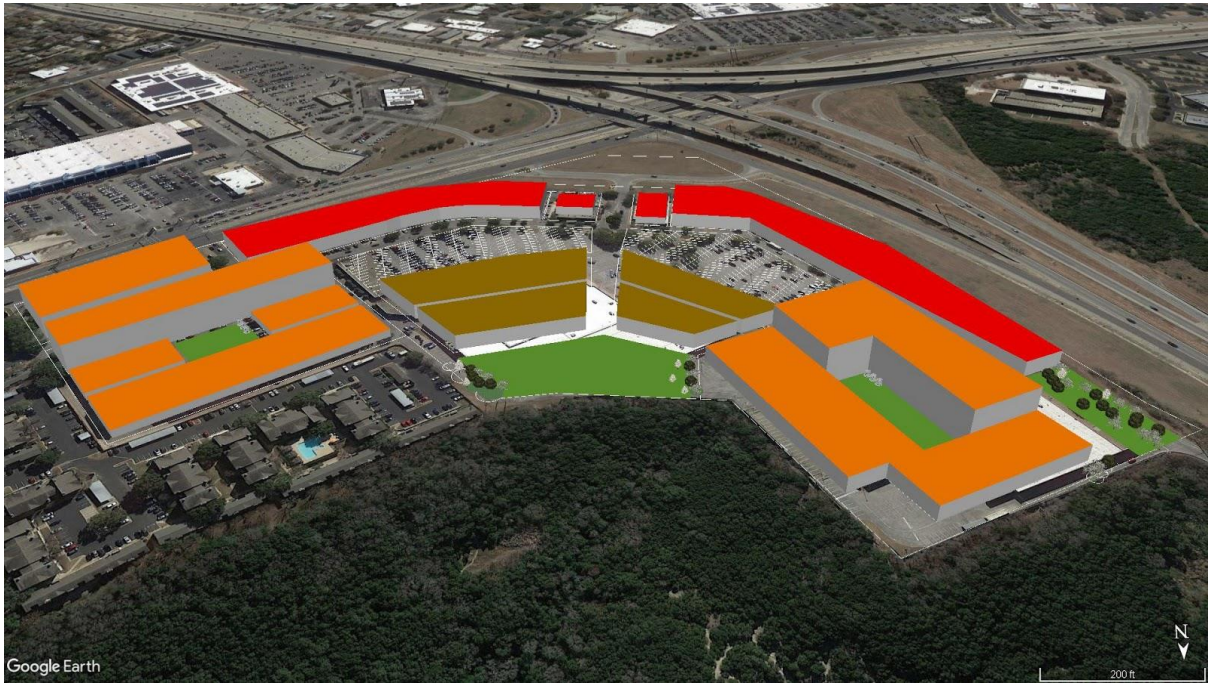


Figure 35: Bird's Eye View looking South

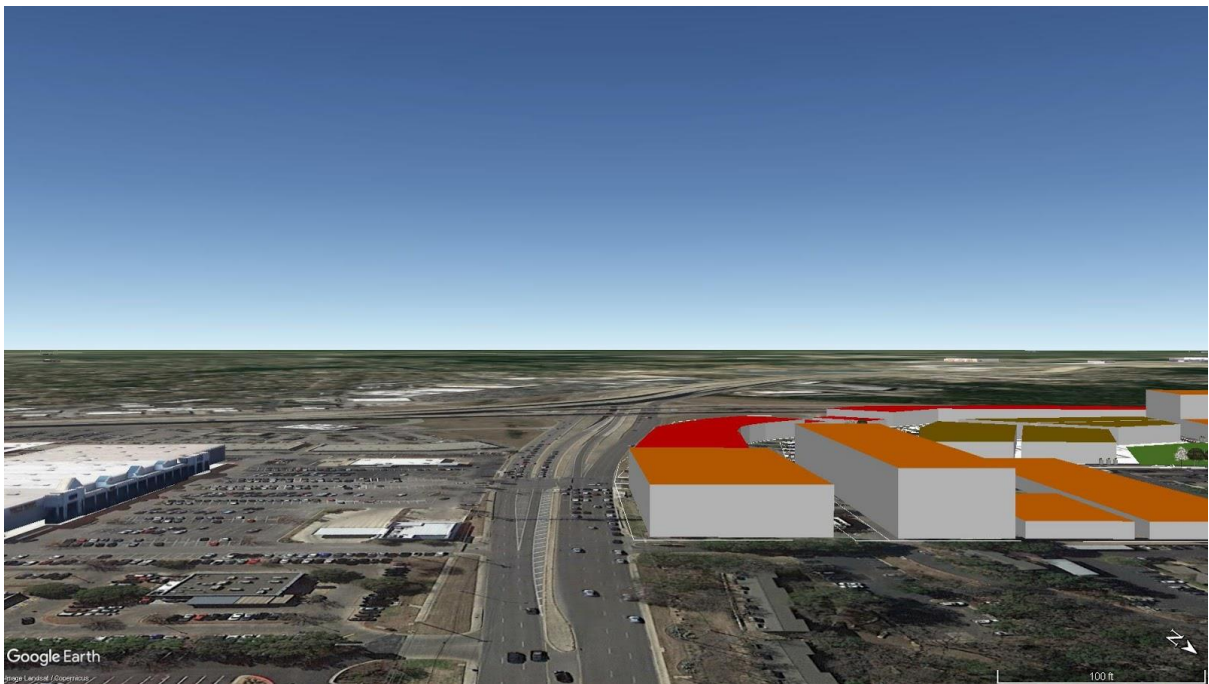


Figure 36: Birds eye view looking southeast, note that in Google Earth most cars and buildings are in 2D therefore the image is not to scale.

The multifamily residential units on the site will be for sale units and for rent. The idea behind this was to create mixed income housing units for all residents of Austin, whether they are young adults looking to buy their first homes or senior citizens who want to downsize and stay in the city. One unique feature of this is that the apartment complex will partner with Capital Metro to create a park and ride similar to the one currently at the Triangle. This will allow for more riders to use the 803 and other transit stops that may come to the area.

The multifamily units that are adjacent to the Barton Creek Greenbelt (Buildings V & W) were massed to maximize the number of residents who could take advantage of the views that this site has to offer. Building V will be closest to the greenbelt and be two stories tall. In the center will be a courtyard/community space that residents will be able to gather in. The other half of the site, Building U will be 5 stories tall, the first three stories will be built as a parking garage for residents of both U&V residential buildings. On top of this will be two stories of residential units. By having the three floors of parking elevate the remaining two stories, residents in this building will also be able to have views of the greenbelt and overlook the Capital of Texas highway and other section of the greenbelt.

The residential units will be rental apartments and for sale condos. For sale condos will be located with Building V & U. Buildings I, J, K, M, & N will be for rent. The idea behind this was to create affordable housing units ⁴⁹ for all residents of Austin, whether

⁴⁹ Affordable housing units will be households at or below 60% of Median Family Income.

they are young adults looking to buy their first homes or senior citizens who want to downsize and stay in the city.

These programs were proposed with CodeNEXT in mind using incentives the city has to offer. While the maximum density for this is 36 units/acre, this zoning is eligible to participate in the *Affordable Housing Bonus Program*. With the participation of the density program, the site may be eligible to get more density (up to 36 more units per acre and an additional 15' in height, or 18 acres and 0' in height in zones as MU3A ⁵⁰) on site provided some of these units be dedicated to affordable housing. Based on the square footage of residential buildings, developers would have to participate in this program to use the designated square footage for each acre. This would give a total density of up to 72 units/acre. The affordability aspect of this program will be a term of 40 years for rental properties, families that are eligible to participate will have an MFI (Median Family Income) of at or below 60%. The number of units that will be affordable will be 2% ⁵¹. While the city has set this limit, in order to create more affordability in Lamar 71, I believe the number should be increased to at least 10%.

Office and retail spaces will line along the edge of the site that faces the South Lamar Corridor and Capital of Texas Highway to draw in those who use these roads daily ⁵². Retail will be on the first floor, while the offices will be the second story with a Floor

⁵⁰ CodeNEXT Draft 3, Table 23-4D 4140(A).

⁵¹ The 2% was determined by the Affordable Housing Bonus Program Potential Rental Set-Aside map by CodeNEXT. The Brodie Oaks Shopping center is located in sub-area AA which requires 2% of units to be set aside at affordable rates of households at or below 60% of median family income.

⁵² In this proposal, the current buildings will be demolished and replaced.

to Area ratio of 2. While downtown Austin is continuing to construct a vast amount of new office space, it also has one of the highest rates of pre-leasing in the country, “About 53% of square footage slated to be delivered between 2018-2022 has already been pre-leased” (Anderson, 2018). By creating more available office space away from the downtown corridor next to the 803 Rapid bus stop, more businesses will locate here and encourage more employees to use transit to get to this site.

Surface parking will stay the same, angled parking. This is to provide space for visitors/office tenants/mixed use tenants and more. Parking for the office buildings will be connected to the office spaces. Residential buildings will have designated spaces within the building for residents who won’t have to worry about finding spaces to park. In addition, this will save funds as nothing new will be constructed on the site, just most likely repaving of roads and new paint (for parcels O & Y).

The Mixed Use/Live Work space was created to draw in local businesses that could not afford to stay downtown or South Congress where there is little to no opportunity for mom and pop stores anymore ⁵³. These units can also be live work space where residents can live in the same building they work ⁵⁴. The remaining residential units will be normal mixed-use structures with businesses on the first floor (retail, cafes etc..) and the upper level containing for rent residential units.

⁵³ <http://kut.org/post/what-does-future-hold-local-businesses-south-congress>

⁵⁴ The businesses that locate here would not rely on exposure to high-traffic-roadways since they are not located along the South Lamar or Capital of Texas Highway. Example of local businesses that would locate here would be tax firms, bridal boutiques, doctors’ offices etc....

The open space at the back edge was designated as the “heart” of Brodie Oaks for several reasons; the first is to create a formal access to the Barton Creek Greenbelt from this center with designated trails to ensure that everyone who uses this space feels welcome and safe. The second reason is that, when heavy rain storms occur, this space will act as a detention pond to prevent polluted runoff water from going into the Barton Creek Greenbelt and Edwards Aquifer, identical to The Denizen and their community center. The third reason was to create a space that felt inviting and open without having to deal with the noise pollution that is associated with the South Lamar Corridor and Capital of Texas highway.

Low impact development/stormwater mitigation was one of the primary concerns when planning Lamar 71. Protecting the Barton Creek Greenbelt and Edwards Aquifer are very important to Imagine Austin and the city overall. There are several ways in which the site is has low impact development. As previously mentioned, the open space will act as a detention pond during periods of heavy storms similar to the amphitheater at the Denizen. There will be pervious trail that will connect all 28 acres to each other from commercial to residential and mixed use to the park and ride, similar to the Charlotte-Mecklenburg, NC. The trails will also run parallel to the roads for cars to ensure connectivity. Parcel X is lined with trees since this area has a higher slope than the rest of the site. There will also be a change in slope (decreasing) from parcel X to the open space/plaza to direct all of the stormwater runoff from here into the city’s water system. Because of the steep hill that is at the edge of the site where Toys R Us currently is, the edge will be designed to avoid stormwater runoff to keep the slope stable. All building types will have rainwater cisterns

to collect rain water to use for things such as community gardens and to manage the landscape throughout the site. The vegetation will consist of native Texas plants and trees to increase shade throughout the site and decrease need to maintain watering them.

In addition to green infrastructure, on the southernmost edge of the site that is at the intersection of South Lamar and Capital of Texas Highway, there will also be bioswales to mitigate flood control in the area, similar to some techniques used at the Denizen. Depending on what incentives the city has with commercial developments, Brodie Oaks could have solar panels on residential buildings and along the frontage roads to provide energy back to the site.

Chapter 7: Conclusion

While many shopping centers and big box retailers have become obsolete and have had to lay off many middle-class workers, a door has swung wide open in the potential opportunities to proposed new types of communities that don't require motor vehicles where necessities and entertainment are within walking distance. As discussed, there are projects all over Texas (and the United States) that are pushing the envelope on what can be done with these redeveloped communities. These "new" types of communities being developed in cities include social spaces that are walkable, have open space, and can live in or nearby (such as Trinity Groves and Mueller in Austin). They not only focus on creating social spaces and economic development, but also focus on increasingly important aspects such as; Low Impact Development, affordability, and redevelopment of large abandoned sites.

The redevelopment of the Brodie Oaks Shopping Center combined with CodeNEXT gives the potential to provide more housing for residents of Austin of all types, such as service workers, entrepreneurs, office workers and more that are in the lower income brackets. There is also the possibility to provide a live, work and play space. Most importantly there is the possibility for this redevelopment to be the one of the first projects under CodeNEXT that would determine where the bar would be set for the future of the City of Austin, and Lionstone is able to purchase the last parcel to begin this process. If Lionstone were to successfully develop this site while sticking to the three E's, this site will not only be sustainable for all residents who live here, but also for Lionstone themselves in terms of profitability.

The restraints that the Brodie Oaks shopping center has include the South Lamar Corridor, Capital of Texas Highway, the Barton Creek Greenbelt and Edwards Aquifer. When this project is successful, this will be a prime example for other developers to follow when the code passes and to display that even with a brand-new land development code and physical restrictions, redevelopment in an environmentally, equitable and economically way is possible.

If the City of Austin can come to an agreement and bridge the gap between residents and developers, there is the possibility that the city can finally begin to address larger issues with more reasonable and tangible solutions. With these solutions, we can not only Keep Austin Weird, but also Keep Austin Livable.

Appendix:

Type	Average size (square feet) <i>Sizes taken from Rent Cafe</i> ⁵⁵
Studio	488
One-bedroom	719
Two-bedroom	1,057
Three-bedroom	1,364

Table 2: Average size apartments used for measure of units

⁵⁵ RentCafe via <https://www.rentcafe.com/average-rent-market-trends/us/tx/austin/>

Building	Total Units	Unit Breakdown
I	83	83 one-bedroom
J	56	10 studios, 30 one-bedroom, 16 two-bedroom
M	16	7 one-bedroom, 5 two-bedroom, 4 three-bedroom
N	100	36 one-bedroom, 28 two-bedroom, 36 three-bedroom
P	50	30 one-bedroom, 20 two-bedroom
Q	37	15 studios, 10 one-bedroom, 2 two-bedroom, 5 three-bedroom
R	30	10 studios, 12 one-bedroom, 8 two-bedroom
S	16	7 one-bedroom, 5 two-bedroom, 4 three-bedroom
U	115	30 one-bedroom, 85 two-bedroom
V	153	39 one-bedroom, 85 two-bedroom

Table 3: Breakdown of number of units for each residential building.

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Vita

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